CREDIBLE
Behavioral Health Software

Clinical Quality Measures (CQM) Guide for Credible Software

Version 2.0 – September 2017

1 Choice Hotels Circle, 11th Floor, Rockville, MD 20850
o: 301-652-9500 f: 240-744-3068 e: info@credibleinc.com w: credibleinc.com

Clinical Quality Measurements Guide
for Credible Software

Credible Behavioral Health, Inc.
1 Choice Hotels Circle, 11th Floor
Rockville, MD 20850
301-652-9500

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Introduction

This guide is for Credible Partners that are utilizing the Credible CQM Tool for pursuing incentive based programs through the Medicare or Medicaid EHR Incentive Based Programs, including CQMs required for the CCBHC demonstration grant from SAMHSA. It provides the information necessary to use Credible in a meaningful way and capture the data needed for attestation. Credible Behavioral Health 10.1 successfully passed the meaningful use certification criteria for ONC HIT 2014 Edition certification on September 28, 2015.

Disclaimer

The instructions in this guide are based on the steps Credible followed for certification purposes. Regardless of whether you follow these instructions or adjust them to suit the needs of your Agency, it is your responsibility to ensure that the steps you follow and the results you generate comply with all meaningful use requirements.

> In other words, Clinical Quality Measurements are **tools** that **measure** and **track quality services**.

Resources

➥ For more information on the most current resources to support **Electronic Clinical Quality Improvement**, please visit the eCQI Resource Center from CMS: https://ecqi.healthit.gov/

The Centers for Medicare & Medicaid Services (CMS) and the Office of the National Coordinator for Health IT (ONC) are working to improve the health of our nation by transforming care from a volume-based, provider-centered system to a patient-centered, learning health system. The eCQI Resource Center is a joint effort to bring together stakeholders from across the eCQI community and provide a centralized location for news, information, tools and standards related to eCQI and electronic clinical quality measures (eCQMs).

The eCQI Resource Center is a central source of information on federal electronic clinical quality improvement initiatives, including electronic clinical quality measures (eCQMs) and the tools used to support their development, testing, implementation, submission, and reporting.

➥ For more information on Value Sets as they apply to each CQM, please visit the **Value Set Authority Center** from the U.S. National Library of Medicine at: https://vsac.nlm.nih.gov/

The **Value Set Authority Center** (VSAC) is provided by the National Library of Medicine (NLM), in collaboration with the Office of the National Coordinator for Health Information Technology and the Centers for Medicare & Medicaid Services.

The VSAC provides downloadable access to all official versions of vocabulary value sets contained in the 2014 electronic Clinical Quality Measures (eCQMs). Each value set consists of the numerical values (codes) and human-readable names (terms), drawn from standard vocabularies such as SNOMED CT®, RxNorm, LOINC and ICD-10-CM, which are used to define clinical concepts used in clinical quality measures (e.g., patients with diabetes, clinical visit). For information on the eCQMs, visit the *eCQI Resource Center*.

For more information on the Quality Payment Program, MIPS measures and Education and Tools, please visit https://qpp.cms.gov/.

Quality Payment PROGRAM

The **Quality Payment Program** improves Medicare by helping you focus on care quality and the one thing that matters most — making patients healthier. The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) ended the Sustainable Growth Rate formula, which threatened clinicians participating in Medicare with potential payment cliffs for 13 years. If you participate in Medicare Part B, you are part of the dedicated team of clinicians who serve more than 55 million of the country's most vulnerable Americans, and the Quality Payment Program will provide new tools and resources to help you give your patients the best possible care. You can choose how you want to participate based on your practice size, specialty, location, or patient population.

The Quality Payment Program has two tracks you can choose:

- **Advanced Alternative Payment Models (APMs)** or
- The **Merit-based Incentive Payment System (MIPS)**

Please note: This guide highlights alignment with the MIPS Quality category, as available with Quality Payment Program's publicly published information on this guide's publication date, with three measure components at the header of each Clinical Quality Measure:

- MIPS Quality:
  - ID – {MIPS Quality Identification Number}
  - Type – {Measure Type}
  - High Priority – {Yes/No}

For more information on the **National Quality Forum (NQF)** as it relates to Clinical Quality Measures, please visit the NQF Quality Positioning System™ at http://www.qualityforum.org/QPS/QPSTool.aspx.

NATIONAL QUALITY FORUM

NQF's endorsement process is a transparent, consensus-based practice that brings together diverse healthcare stakeholders from the public and private sector to foster quality improvement.

NQF convenes multi-stakeholder Standing Committees in topical areas that are charged to review and recommend submitted measures for endorsement to NQF's *Consensus Standards Approval Committee (CSAC)*. The CSAC considers all measures recommended for NQF endorsement.

Today, about 300 NQF-endorsed measures are used in more than 20 federal public reporting and pay-for-performance programs as well as in private-sector and state programs. Additionally, the Department of Health and Human Services relies on the guidance of *NQF's Measure Applications Partnership (MAP)* to foster the use of a more uniform set of measures across federal programs that provide health coverage for about 120 million Americans.

More information on NQF's "Work in Quality Measurement" can be found here: http://www.qualityforum.org/about_nqf/work_in_quality_measurement/. The Field Guide to NQF Resources is additionally available at http://www.qualityforum.org/field_guide/.

National Quality Strategy (NQS) Domains:

The National Quality Strategy (NQS) was first published in March 2011 as the National Strategy for Quality Improvement in Health Care, and is led by the Agency for Healthcare Research and Quality on behalf of the U.S. Department of Health and Human Services (HHS).

Mandated by the *Patient Protection and Affordable Care Act*, the **National Quality Strategy** was developed through a transparent and collaborative process with input from a range of stakeholders. More than 300 groups, organizations, and individuals, representing all sectors of the health care industry and the general public, provided comments. Based on this input, the National Quality Strategy established a set of ***three overarching aims*** that builds on the Institute for Healthcare Improvement's Triple Aim®, supported by ***six priorities*** that address the most common health concerns that Americans face. To align with National Quality Strategy, stakeholders can use ***nine levers*** to align their core business or organizational functions to drive improvement on the aims and priorities. (*http://www.ahrq.gov/workingforquality/about.htm*)

SAMHSA Section 223 Demonstration Grant

In January 2017, the US Department of Health and Human Services announced the selection of eight states for participation in a two-year **Certified Community Behavioral Health Clinic (CCBHC)** demonstration program designed with certain aims:

- *improve behavioral health services in their communities*
- *integrate behavioral health with physical health care*
- *increase consistent use of evidence-based practices*
- *improve access to high quality care for people with mental and substance use disorders*

The eight states selected for this two-year program are Missouri, New York, New Jersey, Nevada, Oklahoma, Oregon, and Pennsylvania. States will commence their demonstration no later than July 1, 2017.

A sizeable portion of the measures required for this demonstration period are CQM-aligned and are as follows:

Behavioral Health Clinic Quality Measures	*SAMHSA Identifier*	*NQF Number*	*CQM Number*
Screening for Clinical Depression and Follow-Up Plan	*CDF-BH*	*418*	**2**
Preventive Care and Screening: Adult Body Mass Index (BMI) Screening and Follow-Up	*BMI-SF*	*421*	**69**
Antidepressant Medication Management	*AMM-BH*	*105*	**128**
Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication	*ADD-BH*	*108*	**136**
Initiation and engagement of alcohol and other drug dependence treatment	*IET-BH*	*4*	**137**
Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention	*TSC*	*28*	**138**
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC)	*WCC-BH*	*24*	**155**
Depression Remission at 12 months	*DEP-REM-12*	*710*	**159**
Adult major depressive disorder (MDD): Suicide risk assessment	*SRA-A*	*104*	**161**
Child and adolescent major depressive disorder (MDD): Suicide Risk Assessment	*SRA-BH-C*	*1365*	**177**

For more information on the Section 223 Demonstration Program for CCBHCs visit: https://www.samhsa.gov/section-223

Understanding CQM's in Six Steps:

1. Understand the CQM measure
2. Understanding the Value Sets
3. Connecting the dots: CQM measure > Value Sets > Agency workflow/visits
4. Are CQM coded questions needed?
5. Putting the pieces together, training and involving your staff and practitioners
6. Measuring outcomes via Credible's CQM Tool

Step 1: Locate and understand the CQM measure architecture and anatomy

Each of the 20 CQM Measures in this guide have the following components to allow you to understand the measure in depth:

- **Measure Description** – this is an overview of this measure as a whole and gives a solid synopsis of this clinical measure
- **Measure Definition** – any components of this measure that need further definition, as defined by CMS, are available to understand components of this measure
- **Measure Guidance –** additional CMS guidance on this measure
- **Reporting Criteria –** the who and what you're measuring. Think of the measure logic as a logical equation – these criteria relate different pieces of information together and calculates a measure result.

The populations defined by a proportion measure are:

- **Initial Patient Population (IPP)**: The set of patients (or episodes of care) to be evaluated by the measure.
- **Denominator (D)**: A subset of the IPP.
- **Denominator Exclusions (DExclusion)**: A subset of the Denominator that should not be considered for inclusion in the Numerator.
- **Denominator Exceptions (DException)**: A subset of the Denominator. Only those members of the Denominator that are considered for Numerator membership and are not included are considered for membership in the Denominator Exceptions.
- **Numerator (N)**: A subset of the Denominator. The numerator criteria are the processes or outcomes expected for each patient, procedure, or other unit of measurement defined in the denominator.

The computation of a proportion measure proceeds as follows:

i. Patients or episodes of care are classified using the IPP criteria, and those satisfying the criteria are included in the IPP.

ii. The members of the IPP are classified using the Denominator criteria, and those satisfying the criteria are included in the Denominator.

iii. The members of the Denominator are classified using the Denominator Exclusion criteria, and those satisfying the criteria are included in the Denominator Exclusions.

iv. The members of the Denominator that are not in the Denominator Exclusion population are classified using the Numerator criteria, and those satisfying the criteria are included in the Numerator.

v. Those members of the Denominator that were considered for membership in the Numerator, but were rejected, are classified using the Denominator Exceptions criteria, and those satisfying the criteria are included in the Denominator Exceptions.

"Clinical Quality eMeasure Logic and Implementation Guidance v1.2", Centers for Medicare and Medicaid Services

Step 2: Review/download value sets and apply to your specific workflow and practice

Value Sets – Specific code sets to capture clinical concepts and patient data in the EHR system. Value sets provide definitions of the codes necessary to calculate the eCQM. The value sets for each measure are stored by The National Library of Medicine Value Set Authority Center (VSAC). Through the VSAC, providers, implementers, and developers can access the value sets for each eCQM for the EHR Incentive program. (https://ecqi.healthit.gov/ecqm)

Value Sets

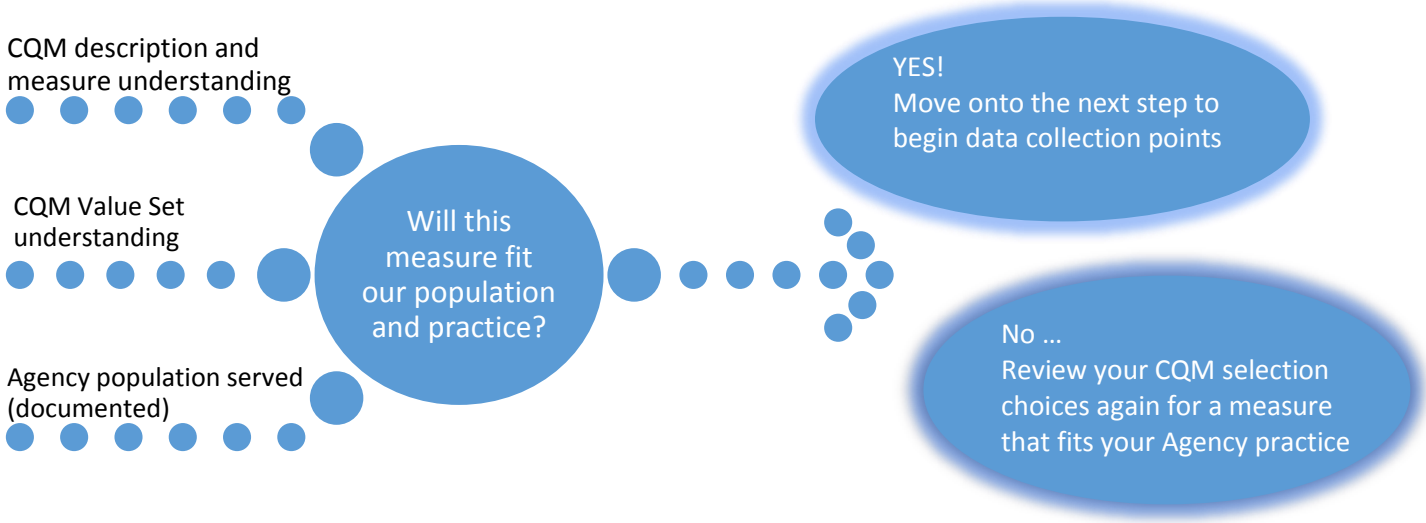
The National Library of Medicine (NLM), in collaboration with ONC and CMS, maintains the NLM Value Set Authority Center (VSAC) (https://vsac.nlm.nih.gov). The VSAC provides downloadable access to all official versions of vocabulary value sets contained in the 2014 clinical quality measures. The value sets provide lists of the numerical value identifiers and individual names from standard vocabularies used to define the clinical concepts (e.g. diabetes, clinical visit) used in the quality eMeasures. NLM has an application programming interface (API) to the VSAC content in addition to a web interface. The VSAC also offers a Downloadable Resource Table (DRT). This table provides links to Excel and SVS-compliant XML for all Eligible Hospital (EH), Eligible Provider (EP), and EP+EH value sets.

Please note: Currently, the VSAC contains some value sets with provisional codes. These provisional codes are preliminary to forthcoming versions of their respective code systems, and the provisional codes will have official versions as the code systems are updated in the near future. In future versions of the measures, these codes will cease to be provisional codes when they are officially released in a version of their code system. The VSAC will be updated on a regular basis as the quality measures are updated.

Access to the Value Set Authority Center requires a free Unified Medical Language System® Metathesaurus License (available at https://uts.nlm.nih.gov/license.html). It is expected that any use of value sets is consistent with these licensing requirements and copyright protections.

"Clinical Quality eMeasure Logic and Implementation Guidance v1.2", Centers for Medicare and Medicaid Services

Step 3: Connecting the dots: CQM measure > Value Sets > Agency workflow/visits



Step 4: Are there "Credible Form Additions" on the measure description in this guide?

***HINT**: These questions need to be added to a form that will generate a visit that will be coded with one of the value sets (CPT or HCPC) of the measure.*

If coded questions (SNOMEDCT or LOINC) need to exist per the measure description and value set(s), a notation will be available as guidance within this guide.

Step 5: Putting the pieces together, training and involving your staff and practitioners

Success begins with engaging, educating and empowering your users – giving meaning to the measures, finding and using your physician champions and allowing dialogue for engagement and exploration.

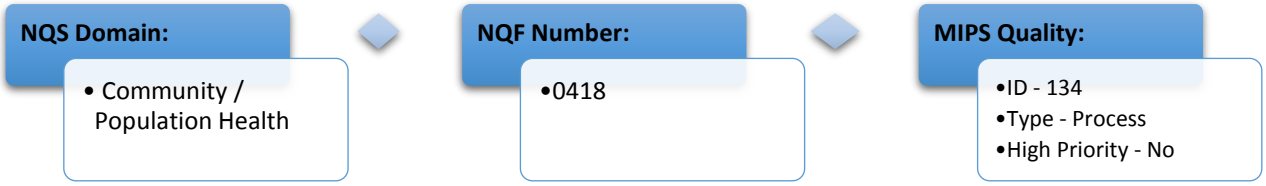
Step 6: Measuring outcomes via Credible's CQM Tool

Utilizing Credible's CQM Tool to manage the measures in the dashboard feature of the report, and the ability to drill down in this graphical representation of your CQM data, is a powerful final component to both EP and EHR administrators at your Agency.

Measures

Regarding measures, please note the following:
Where coded questions are listed, this guide supplies samples of valid types per measure. However, this is not an exhaustive list. Please consult the value sets and compare them to the services provided by your Agency.

Measure: 2v6: Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan



Measure Description:

Percentage of patients aged 12 years and older screened for 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.

Measure Definition:

Screening:

Completion of a clinical or diagnostic tool used to identify people at risk of developing or having a certain disease or condition, even in the absence of symptoms.

Standardized Depression Screening Tool - A normalized and validated depression screening tool developed for the patient population in which it is being utilized

Examples of depression screening tools include but are not limited to:

Adolescent Screening Tools (12-17 years)

- Patient Health Questionnaire for Adolescents (PHQ-A)
- Beck Depression Inventory-Primary Care Version (BDI-PC)
- Mood Feeling Questionnaire (MFQ)
- Center for Epidemiologic Studies Depression Scale (CES-D)
- PRIME MD-PHQ2

Adult Screening Tools (18 years and older)

- Patient Health Questionnaire (PHQ9)
- Beck Depression Inventory (BDI or BDI-II)
- Center for Epidemiologic Studies Depression Scale (CES-D)
- Depression Scale (DEPS)

- Duke Anxiety-Depression Scale (DADS)
- Geriatric Depression Scale (SDS)
- Cornell Scale Screening
- PRIME MD-PHQ

Follow-Up Plan:
Documented follow-up for a positive depression screening must include one or more of the following:

- Additional evaluation for depression
- Suicide Risk Assessment
- Referral to a practitioner who is qualified to diagnose and treat depression
- Pharmacological interventions
- Other interventions or follow-up for the diagnosis or treatment of depression

Measure Guidance:

A clinical depression screen is completed 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.

Screening Tools:

- The name of the age appropriate standardized depression screening tool utilized must be documented in the medical record
- The depression screening must be reviewed and addressed in the office of the provider, filing the code, on the date of the encounter
- The screening and encounter must occur on the same date
- Standardized Depression Screening Tools should be normalized and validated for the age appropriate patient population in which they are used and must be documented in the medical record

Follow-Up Plan:

- The follow-up plan must be related to a positive depression screening, example: *Patient referred for psychiatric evaluation due to positive depression screening*.

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
All patients aged 12 years and older before the beginning of the measurement period with at least one eligible encounter during the measurement period.	Equals Initial Population	Patients with an active diagnosis for Depression or a diagnosis of Bipolar Disorder	Patients screened for clinical depression on the date of the encounter using an age appropriate standardized tool AND if positive, a follow-up plan is documented on the	None

			date of the positive screen	

Denominator Exceptions:

Patient Reason(s)

Patient refuses to participate

OR

Medical Reason(s)

Patient is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient's health status

OR

Situations where the patient's functional capacity or motivation to improve may impact the accuracy of results of standardized depression assessment tools. For example: certain court appointed cases or cases of delirium

Value Sets / Data Criteria:

- "Diagnosis, Active: Bipolar Diagnosis" using "Bipolar Diagnosis Grouping Value Set (2.16.840.1.113883.3.600.450)"
- "Diagnosis, Active: Depression diagnosis" using "Depression diagnosis Grouping Value Set (2.16.840.1.113883.3.600.145)"
- "Encounter, Performed: Depression Screening Encounter Codes" using "Depression Screening Encounter Codes Grouping Value Set (2.16.840.1.113883.3.600.1916)"
- "Intervention, Order: Referral for Depression Adolescent" using "Referral for Depression Adolescent SNOMEDCT Value Set (2.16.840.1.113883.3.600.537)"
- "Intervention, Order: Referral for Depression Adult" using "Referral for Depression Adult SNOMEDCT Value Set (2.16.840.1.113883.3.600.538)"
- "Intervention, Performed: Additional evaluation for depression - adolescent" using "Additional evaluation for depression - adolescent SNOMEDCT Value Set (2.16.840.1.113883.3.600.1542)"
- "Intervention, Performed: Additional evaluation for depression - adult" using "Additional evaluation for depression - adult SNOMEDCT Value Set (2.16.840.1.113883.3.600.1545)"
- "Intervention, Performed: Follow-up for depression - adolescent" using "Follow-up for depression - adolescent SNOMEDCT Value Set (2.16.840.1.113883.3.600.467)"
- "Intervention, Performed: Follow-up for depression - adult" using "Follow-up for depression - adult SNOMEDCT Value Set (2.16.840.1.113883.3.600.468)"
- "Medication, Order: Depression medications - adolescent" using "Depression medications - adolescent RXNORM Value Set (2.16.840.1.113883.3.600.469)"
- "Medication, Order: Depression medications - adult" using "Depression medications - adult RXNORM Value Set (2.16.840.1.113883.3.600.470)"
- "Procedure, Performed: Suicide Risk Assessment" using "Suicide Risk Assessment SNOMEDCT Value Set (2.16.840.1.113883.3.600.559)"
- "Risk Category Assessment: Adolescent Depression Screening" using "Adolescent Depression Screening LOINC Value Set (2.16.840.1.113883.3.600.2452)"
- "Risk Category Assessment: Adult Depression Screening" using "Adult Depression Screening LOINC Value Set (2.16.840.1.113883.3.600.2449)"
- "Risk Category Assessment not done: Medical or Other reason not done" using "Medical or Other reason not done SNOMEDCT Value Set (2.16.840.1.113883.3.600.1.1502)"
- "Risk Category Assessment not done: Patient Reason refused" using "Patient Reason refused SNOMEDCT Value Set (2.16.840.1.113883.3.600.791)"
- Attribute: "Result: Negative Depression Screening" using "Negative Depression Screening SNOMEDCT Value Set (2.16.840.1.113883.3.600.2451)"

- Attribute: "Result: Positive Depression Screening" using "Positive Depression Screening SNOMEDCT Value Set (2.16.840.1.113883.3.600.2450)"

Credible Form Additions:

The following coded form questions are necessary to capture the documentation that the clinician completed or did not perform the use of a clinical or diagnostic tool used to identify people at risk of developing or having a certain disease or condition, even in the absence of symptoms. These series of questions, based on age and follow up for suicidality, are all coded drop-down responses are to be added to a form which will code to a visit using one of the encounter codes appropriate for this measure.

SNOMEDCT Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Question: Adult Depression Screening (LOINC 73832-8)

- Depression Screening Positive (situation) (SNOMEDCT 428181000124104)
- Depression Screening Negative (finding) (SNOMEDCT 428171000124102)
- Not performed due to Medical Reason: Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Medical Reason: Complication of medical care (disorder) (SNOMEDCT 35688006)
- Not performed due to Patient Reason: Patient non-compliant - refused intervention / support (situation) (SNOMEDCT 413311005)
- Not performed due to Patient Reason: Refused (qualifier value) (SNOMEDCT 443390004)

Question: Adolescent Depression Screening (LOINC 73831-0)

- Depression Screening Positive (situation) (SNOMEDCT 428181000124104)
- Depression Screening Negative (finding) (SNOMEDCT 428171000124102)
- Not performed due to Medical Reason: Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Medical Reason: Complication of medical care (disorder) (SNOMEDCT 35688006)
- Not performed due to Patient Reason: Patient non-compliant - refused intervention / support (situation) (SNOMEDCT 413311005)
- Not performed due to Patient Reason: Refused (qualifier value) (SNOMEDCT 443390004)

Question: Suicide risk assessment (procedure) (SNOMEDCT 225337009)

- Performed (SNOMEDCT 398166005)
- Not performed due to Medical Reason: Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Medical Reason: Complication of medical care (disorder) (SNOMEDCT 35688006)
- Not performed due to Patient Reason: Patient non-compliant - refused intervention / support (situation) (SNOMEDCT 413311005)
- Not performed due to Patient Reason: Refused (qualifier value) (SNOMEDCT 443390004)

Population Criteria:

- **Initial Population =**
  - AND: Age>= 12 year(s) at: "Measurement Period"
  - AND: "Encounter, Performed: Depression Screening Encounter Codes" during "Measurement Period"
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**

- OR: "Diagnosis: Depression diagnosis" satisfies all:
  - starts before start of ("Encounter, Performed: Depression Screening Encounter Codes" during "Measurement Period")
  - overlaps ("Encounter, Performed: Depression Screening Encounter Codes" during "Measurement Period")
- OR: "Diagnosis: Bipolar Diagnosis" satisfies all:
  - starts before start of ("Encounter, Performed: Depression Screening Encounter Codes" during "Measurement Period")
  - overlaps ("Encounter, Performed: Depression Screening Encounter Codes" during "Measurement Period")

- **Numerator =**
  - AND:
    - OR:
      - AND: Most Recent: "Occurrence A of Risk Category Assessment: Adolescent Depression Screening (result)" during ("Encounter, Performed: Depression Screening Encounter Codes" during "Measurement Period")
      - AND: "Occurrence A of Risk Category Assessment: Adolescent Depression Screening (result: Negative Depression Screening)"
      - AND: Age< 18 year(s) at: "Measurement Period"
    - OR:
      - AND: Most Recent: "Occurrence A of Risk Category Assessment: Adolescent Depression Screening (result)" during ("Encounter, Performed: Depression Screening Encounter Codes" during "Measurement Period")
      - AND: "Occurrence A of Risk Category Assessment: Adolescent Depression Screening (result: Positive Depression Screening)"
      - AND: Union of:
        - "Intervention, Performed: Additional evaluation for depression - adolescent"
        - "Intervention, Order: Referral for Depression Adolescent"
        - "Medication, Order: Depression medications - adolescent"
        - "Intervention, Performed: Follow-up for depression - adolescent"
        - "Procedure, Performed: Suicide Risk Assessment"
        - <= 1 day(s) starts after or concurrent with start of "Occurrence A of Risk Category Assessment: Adolescent Depression Screening"
      - AND: Age< 18 year(s) at: "Measurement Period"
    - OR:
      - AND: Most Recent: "Occurrence A of Risk Category Assessment: Adult Depression Screening (result)" during ("Encounter, Performed: Depression Screening Encounter Codes" during "Measurement Period")
      - AND: "Occurrence A of Risk Category Assessment: Adult Depression Screening (result: Negative Depression Screening)"
      - AND: Age>= 18 year(s) at: "Measurement Period"
    - OR:
      - AND: Most Recent: "Occurrence A of Risk Category Assessment: Adult Depression Screening (result)" during ("Encounter, Performed: Depression Screening Encounter Codes" during "Measurement Period")
      - AND: "Occurrence A of Risk Category Assessment: Adult Depression Screening (result: Positive Depression Screening)"
      - AND: Union of:
        - "Intervention, Performed: Additional evaluation for depression - adult"
        - "Intervention, Order: Referral for Depression Adult"
        - "Medication, Order: Depression medications - adult"
        - "Intervention, Performed: Follow-up for depression - adult"
        - "Procedure, Performed: Suicide Risk Assessment"
        - <= 1 day(s) starts after or concurrent with start of "Occurrence A of Risk Category Assessment: Adult Depression Screening"
      - AND: Age>= 18 year(s) at: "Measurement Period"
- **Numerator Exclusions =**
  - None

- **Denominator Exceptions =**
    - OR:
        - AND: Union of:
            - "Risk Category Assessment not done: Medical or Other reason not done" for "Adolescent Depression Screening"
            - "Risk Category Assessment not done: Patient Reason refused" for "Adolescent Depression Screening"
            - during "Encounter, Performed: Depression Screening Encounter Codes"
        - AND NOT: "Risk Category Assessment: Adolescent Depression Screening" during "Measurement Period"
    - OR:
        - AND: Union of:
            - "Risk Category Assessment not done: Medical or Other reason not done" for "Adult Depression Screening"
            - "Risk Category Assessment not done: Patient Reason refused" for "Adult Depression Screening"
            - during "Encounter, Performed: Depression Screening Encounter Codes"
        - AND NOT: "Risk Category Assessment: Adult Depression Screening" during "Measurement Period"
- **Stratification =**
    - None

Rationale:

In 2008, the Geriatric Mental Foundation reported that of the population aged 65 and older in the United States, 15-20 percent of adults had experienced depression (Geriatric Mental Health Foundation, 2008), while 7 million of the same population were affected by depression (Steinman, 2007, p. 175) and accounted for 16 percent of suicide deaths in 2004 (Centers for Disease Control and Prevention, 2007).

The World Health Organization (WHO), as cited by Pratt & Brody (2008), found that major depression was the leading cause of disability worldwide. "Overall, approximately 80% of persons with depression reported some level of difficulty in functioning because of their depressive symptoms. In addition, 35% of males and 22% of females with depression reported that their depressive symptoms make it very or extremely difficult for them to work, get things done at home, or get along with other people. More than one-half of all persons with mild depressive symptoms also reported some difficulty in daily functioning attributable to their symptoms" (Pratt & Brody, 2008, p.2). Pratt & Brody (2008) found that depression rates were higher in the 40-59 age brackets, is more common in females than in males, and higher in non- Hispanic black persons than in their non-Hispanic white counterparts (Pratt & Brody, 2008, p. 2). Disparities due to income have also been observed, as those with lower income (below the federal poverty line) in the 18-39 and 40-59 age brackets, whom experience higher depression rates than those with higher income. This disparity is not observable in other age categories (Pratt & Brody, 2008, p. 2).

Among children, the rate of current or recent depression stands at 3% and at 6% for adolescents, whose lifetime incidence rate of major depressive disorder (MDD) could be as high as 20% (Williams et al., 2009, p. e716). Borner (2010), states that 20% of adolescents are likely to have experienced depression by the time they are 18 years old and that there is an observed increased onset around puberty. Onset of MDD during adolescence is particularly significant because it is associated with higher risks of suicide attempt, death by suicide and MDD recurrence in young adulthood. Additionally MDD is "associated with early pregnancy, decreased school performance, and impaired work, social, and family functioning during young adulthood" (Williams et al., 2009, p. e716). According to Zalsman et al., (2006) as reported in Borner et al. (2010), "depression ranks among the most commonly reported mental health problems in adolescent girls" (p. 947).

"The negative outcomes associated with early onset depression, make it crucial to identify and treat depression in its early stages" (Borner, 2010, p. 948). While Primary Care Providers (PCPs) serve as the first line of defense in the detection of depression, studies show that PCPs fail to recognize up to 50% of depressed patients, purportedly because of time constraints and a lack of brief, sensitive, easy-to administer psychiatric screening instruments" (Borner, 2010, p. 948). "Coyle et al. (2003), suggested that the picture is more grim for adolescents, and that more than 70% of children and adolescents suffering from serious mood disorders go unrecognized or inadequately treated" (Borner, 2010, p. 948).

The substantial economic burden of depression for individuals and society alike makes a case for screening for depression on a regular basis. This measure seeks to achieve this goal and aligns with the Healthy People 2020 recommendation for routine screening for mental health problems as a part of primary care for both children and adults (U.S. Department of Health and Human Services, 2014). The measure makes important contribution to the quality domain of community and population health.

Clinical Recommendation Statement:

Adolescent Recommendation (12-18 years):

"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" (AHRQ, 2010, p.141).

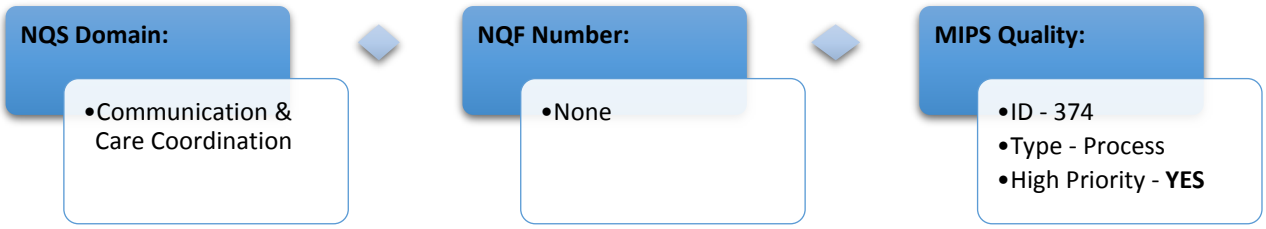
"Clinicians and health care systems should try to consistently screen adolescents, ages 12-18, for major depressive disorder, but only when systems are in place to ensure accurate diagnosis, careful selection of treatment, and close follow-up" (ICSI, 2013, p. 16).

Adult Recommendation (18 years and older):

"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" (AHRQ, 2010, p.136).

"A system that has embedded the elements of best practice and has capacity to effectively manage the volume, should consider routine screening of all patients based on the recommendations of the U.S. Preventive Services Task Force" (ICSI, 2013, p. 7). "Clinicians should use a standardized instrument to screen for depression if it is suspected, based on risk factors or presentation. Clinicians should assess and treat for depression in patients with some comorbidities. Clinicians should acknowledge the impact of culture and cultural differences on physician and mental health. Clinicians should screen and monitor depression in pregnant and post-partum women" (ICSI, 2013, p. 4).

Measure: 50v5: Closing the Referral Loop: Receipt of Specialist Report



Measure Description:

Percentage of patients with referrals, regardless of age, for which the referring provider receives a report from the provider to whom the patient was referred

Measure Definition:

Referral: A request from one physician or other eligible provider to another practitioner for evaluation, treatment, or co-management of a patient's condition. This term encompasses referral and consultation as defined by Centers for Medicare and Medicaid Services.

Measure Guidance:

- The provider to whom the patient was referred should be the same provider that sends the report.
- If there are multiple referrals for a patient during the measurement period, use the first referral.
- The consultant report that will fulfill the referral should be completed after the referral. Eligible professionals reporting on this measure should note that all data for the reporting year is to be submitted by the deadline established by CMS. Therefore, eligible professionals who see patients towards the end of the reporting period (ie, December in particular), should communicate the consultant report as soon as possible in order for those patients to be counted in the measure numerator. Communicating the report as soon as possible will ensure the data is included in the submission to CMS.

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Number of patients, regardless of age, who were referred by one provider to another provider, and who had a visit during the measurement period.	Equals Initial Population	None	Number of patients with a referral, for which the referring provider received a report from the provider to whom the patient was referred.	Not Applicable

Value Sets / Data Criteria:

- "Communication: From Provider to Provider: Consultant Report" using "Consultant Report Grouping Value Set (2.16.840.1.113883.3.464.1003.121.12.1006)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services Grouping Value Set (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17" using "Preventive Care - Established Office Visit, 0 to 17 Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1024)"
- "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up" using "Preventive Care Services - Established Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up" using "Preventive Care Services-Initial Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17" using "Preventive Care- Initial Office Visit, 0 to 17 Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1022)"
- "Intervention, Performed: Referral" using "Referral Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1046)"

Credible Form Additions:

Please note: *2017 eCQI standards have modified this measure and now require a reference to the initial referral. In Credible, this is accomplished by recording the initial referral's visit id in a numeric text box. The notation of the Visit ID should satisfy the qualifier of "initial referral resulting in receipt of a Clinical consultation report (record artifact)".*

The following coded form questions are necessary to capture the visit ID, referral type and communication type and are to be added to a form which will code to a visit using one of the encounter codes appropriate for this measure.

SNOMEDCT Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Numeric Text Box: Visit ID for the initial referral resulting in receipt of a Clinical consultation report (record artifact) (SNOMEDCT 371530004)

Question: Provider to Provider Communcation (indicate type)

- Clinical consultation report (record artifact) (SNOMEDCT 371530004)
- Report of clinical encounter (record artifact) (SNOMEDCT 371531000)
- Confirmatory consultation report (record artifact) (SNOMEDCT 371545006)

Question: Referral Received (indicate type)

- Patient referral for dental care (procedure) (SNOMEDCT 103697008)
- Patient referral to dietitian (procedure) (SNOMEDCT 103699006)
- Referral to physician (procedure) (SNOMEDCT 183515008)
- Referral to psychiatrist for the elderly mentally ill (procedure) (SNOMEDCT 183528001)
- *see note below for additional values*

Additional 'Referral Received' values can be configured utilizing choices from the CQM Value Set "Referral" Value Set (OID 2.16.840.1.113883.3.464.1003.101.12.1046)

Population Criteria:

- **Initial Population =**
  - AND: First: "Occurrence A of Intervention, Performed: Referral" during "Measurement Period"
  - AND: Union of:
    - "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17"
    - "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17"
    - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
    - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Ophthalmological Services"
    - during "Measurement Period"
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND: "Communication: From Provider to Provider: Consultant Report" satisfies all
    - fulfills "Occurrence A of Intervention, Performed: Referral"
    - during "Measurement Period"
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**
  - None

Rationale:

Problems in the outpatient referral and consultation process have been documented, including lack of timeliness of information and inadequate provision of information between the specialist and the requesting physician (Gandhi, 2000; Forrest, 2000; Stille, 2005). In a study of physician satisfaction with the outpatient referral process, Gandhi et al. (2000) found that 68% of specialists reported receiving no information from the primary care provider prior to referral visits, and 25% of primary care providers had still not received any information from specialists 4 weeks after referral visits. In another study of 963 referrals (Forrest, 2000), pediatricians scheduled appointments with specialists for only 39% and sent patient information to the specialists in only 51% of the time.

In a 2006 report to Congress, MedPAC found that care coordination programs improved quality of care for patients, reduced hospitalizations, and improved adherence to evidence-based care guidelines, especially among patients with diabetes and CHD. Associations with cost-savings were less clear; this was attributed to how well the intervention group was chosen and defined, as well as the intervention put in place. Additionally, cost-savings were usually calculated in the short-term, while some argue that the greatest cost-savings accrue over time (MedPAC, 2006).

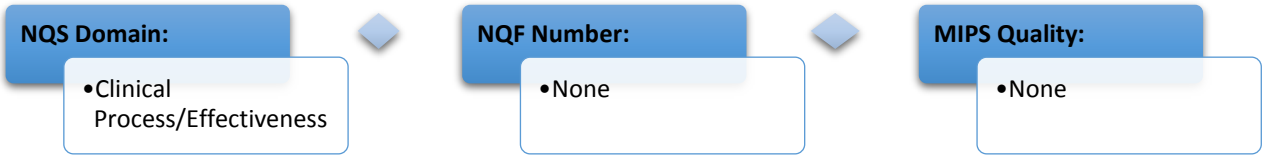
Improved mechanisms for information exchange could facilitate communication between providers, whether for time-limited referrals or consultations, on-going co-management, or during care transitions. For example, a study by Branger et al. (1999) found that an electronic communication network that linked the computer-based patient records of physicians who had shared care of patients with diabetes significantly increased frequency of communications between physicians and availability of important clinical data. There was a 3-fold increase in the likelihood that the specialist provided written communication of results if the primary care physician scheduled appointments and sent patient information to the specialist (Forrest, 2000).

Care coordination is a focal point in the current health care reform and our nation's ambulatory health information technology (HIT) framework. The National Priorities Partnership recently highlighted care coordination as one of the most critical areas for development of quality measurement and improvement (NPP, 2008).

Clinical Recommendation Statement:

None.

Measure: 62v5 HIV/AIDS: Medical Visit



Measure Description:

Percentage of patients, regardless of age, with a diagnosis of HIV/AIDS with at least two medical visits during the measurement year with a minimum of 90 days between each visit

Measure Definition:

None

Measure Guidance:

A medical visit is any visit with a health care professional who provides routine primary care for the patient with HIV/AIDS (may be but is not limited to a primary care clinician, ob/gyn, pediatrician, infectious disease specialist).

Addendum Notes:

Removed from Quality Payment Program

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
All patients, regardless of age, with a diagnosis of HIV/AIDS seen within a 12-month period	Equals Initial Population	None	Patients with at least two medical visits during the measurement year with a minimum of 90 days between each visit	None

Value Sets / Data Criteria:

- "Diagnosis: HIV 1" using "HIV 1 Grouping Value Set (2.16.840.1.113883.3.464.1003.120.12.1004)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Outpatient Consultation" using "Outpatient Consultation Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1008)"

- "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17" using "Preventive Care - Established Office Visit, 0 to 17 Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1024)"
- "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up" using "Preventive Care Services - Established Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up" using "Preventive Care Services-Initial Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17" using "Preventive Care- Initial Office Visit, 0 to 17 Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1022)"

Credible Form Additions:

None.

Population Criteria:

- **Initial Population =**
  - AND: $HIVvisit
  - AND: "Diagnosis: HIV 1" starts before end of "Measurement Period"
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND: $HIVvisit >= 90 day(s) starts after end of $HIVvisit
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**
  - None

$HIVvisit = Union of:

- "Encounter, Performed: Office Visit"
- "Encounter, Performed: Face-to-Face Interaction"
- "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
- "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
- "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17"
- "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17"
- "Encounter, Performed: Outpatient Consultation"
- during "Measurement Period"

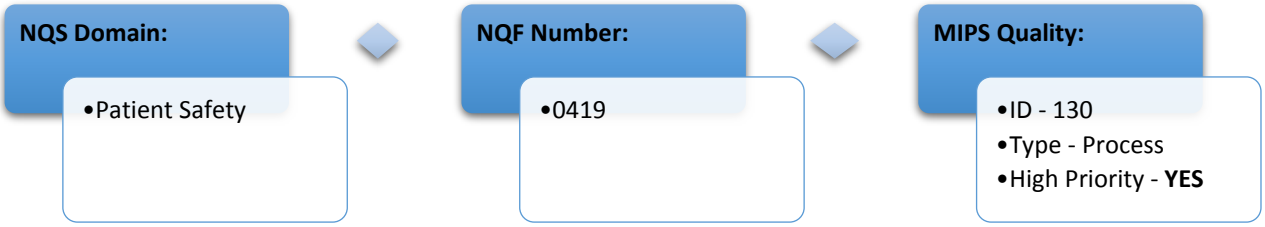
Rationale:

In general, patients with early-stage disease are seen at 3-month intervals to undergo routine medical evaluation and monitoring of CD4 cell count, viral load, and CBC. During the initial evaluation, more frequent visits are common because there is so much information to transmit. Visits should also be more frequent when therapy is introduced and when the CD4 cell count is <200/mm3 because complications are more likely. (Bartlett, 2004)

Clinical Recommendation Statement:

Clinicians should schedule routine monitoring visits at least every 4 months for all HIV-infected patients who are clinically stable. (NYSDOH, 2004)

Measure: 68v6: Documentation of Current Medications in the Medical Record



Measure Description:

Percentage of visits for patients aged 18 years and older for which the eligible professional attests to documenting a list of current medications using all immediate resources available on the date of the encounter. This list must include ALL known prescriptions, over-the-counters, herbals, and vitamin/mineral/dietary (nutritional) supplements AND must contain the medications' name, dosage, frequency and route of administration.

Measure Definition:

Current Medications:
Medications the patient is presently taking including all prescriptions, over-the-counters, herbals and vitamin/mineral/dietary (nutritional) supplements with each medication's name, dosage, frequency and administered route.

Route:
Documentation of the way the medication enters the body (some examples include but are not limited to: oral, sublingual, subcutaneous injections, and/or topical)

Measure Guidance:

- This measure is to be reported for every encounter during the measurement period.
- Eligible professionals reporting this measure may document medication information received from the patient, authorized representative(s), caregiver(s) or other available healthcare resources.
- This list must include all prescriptions, over-the-counter (OTC) products, herbals, vitamins, minerals, dietary (nutritional) supplements AND must contain the medications' name, dosage, frequency and route of administration.
- This measure should also be reported if the eligible professional documented the patient is not currently taking any medications.
- By reporting the action described in this measure, the provider attests to having documented a list of current medications utilizing all immediate resources available at the time of the encounter.

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
All visits occurring during the 12-month reporting period for patients aged 18 years and older before the start of the measurement period	Equals Initial Population	None	Eligible professional attests to documenting, updating or reviewing the patient's current medications using all immediate resources available on the date of the encounter. This list must include ALL known prescriptions, over-the-counters, herbals and vitamin/mineral/dietary (nutritional) supplements AND must contain the medications' name, dosages, frequency and route of administration	None

Denominator Exceptions:

Medical Reason:
Patient is in an urgent or emergent medical situation where time is of the essence and to delay treatment would jeopardize the patient's health status

Value Sets / Data Criteria:

- "Encounter, Performed: Medications Encounter Code Set" using "Medications Encounter Code Set Grouping Value Set (2.16.840.1.113883.3.600.1.1834)"
- "Procedure, Performed: Current Medications Documented SNMD" using "Current Medications Documented SNMD SNOMEDCT Value Set (2.16.840.1.113883.3.600.1.462)"
- "Procedure, Performed not done: Medical or Other reason not done" using "Medical or Other reason not done SNOMEDCT Value Set (2.16.840.1.113883.3.600.1.1502)"

Credible Form Additions:

The following coded form question is necessary to capture the documentation that the eligible professional performed *"attests to documenting a list of current medications using all immediate resources available on the date of the encounter"*. This one coded question, with coded answers, are to be added to a form which will code to a visit using one of the encounter codes appropriate for this measure.

SNOMEDCT Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Question: Documentation of current medications (procedure) performed? (SNOMEDCT 428191000124101)

- Performed (SNOMEDCT 398166005)
- Procedure not indicated (situation) (SNOMED 428119001)
- Not performed due to Medical contraindication (finding) (SNOMEDCT 397745006)
- Not performed due to Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Treatment not tolerated (situation) (SNOMEDCT 407563006)

Population Criteria:

- **Initial Population =**
  - AND: Age >= 18 year(s) at: "Measurement Period"
  - AND: "Occurrence A of Encounter, Performed: Medications Encounter Code Set" during "Measurement Period"
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND: "Procedure, Performed: Current Medications Documented SNMD" during "Occurrence A of Encounter, Performed: Medications Encounter Code Set"
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - OR: "Procedure, Performed not done: Medical or Other reason not done" for "Current Medications Documented SNMD" during "Occurrence A of Encounter, Performed: Medications Encounter Code Set"
- **Stratification =**
  - None

Rationale:

Maintaining an accurate and complete medication list has proven to be a challenging documentation endeavor for various health care provider settings. While most of outpatient encounters (2/3) result in providers prescribing at least one medication, hospitals have been the focus of medication safety efforts (Stock et al., 2009). Nassaralla et al. (2007) caution that this is at odds with the current trend, where patients with chronic illnesses are increasingly being treated in the outpatient setting and require careful monitoring of multiple medications. Additionally, Nassaralla etal. (2007) reveal that it is in fact in outpatient settings where more fatal adverse drug events (ADE) occur when these are compared to those occurring in hospitals (1 of 131 outpatient deaths compared to 1 in 854 inpatient deaths). In the outpatient setting, adverse drug events (ADEs) occur 25% of the time and over one-third of these are considered preventable (Tache et al., 2011). Particularly vulnerable are patients over 65 years, with evidence suggesting that the rate of ADEs per 10,000 person per year increases with age; 25-44 years old at 1.3; 45-64 at 2.2, and 65 + at 3.8 (Sarkar et al., 2011). Another vulnerable group are chronically ill individuals. These population groups are more likely to experience ADEs and subsequent hospitalization.

A multiplicity of providers and inadequate care coordination among them has been identified as barriers to collecting complete and reliable medication records. Documentation of current medications in the medical record facilitates the process of medication review and reconciliation by the provider, which are necessary for reducing ADEs and promoting medication safety. The need for provider to provider coordination regarding medication records, and the existing gap in implementation, is highlighted in the American Medical Association's (AMA) Physician's Role in Medication Reconciliation (2007), which states that "critical patient information, including medical and medication histories, current medications the patient is receiving and taking, and sources of medications, is essential to the delivery of safe medical care. However, interruptions in the continuity of care and information gaps in patient health records are common and significantly affect patient outcomes" (p.7). This is because clinical decisions based on information that is incomplete and/or inaccurate are

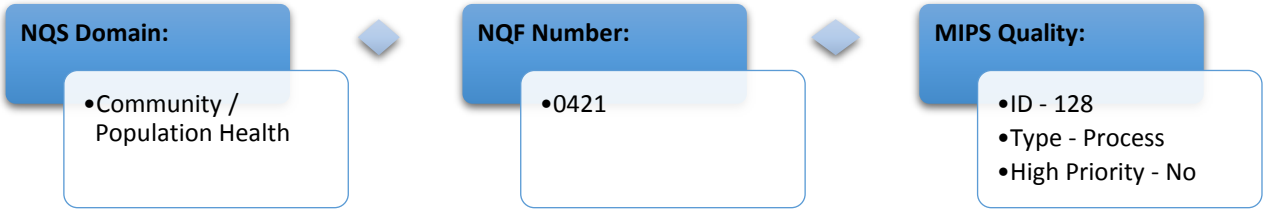
likely to lead to medication error and ADEs. Weeks et al. (2010) noted similar barriers and identified the utilization of health information technology as an opportunity for facilitating the creation of universal medication lists.

Clinical Recommendation Statement:

The Joint Commission's 2015 Ambulatory Care National Patient Safety Goals guide providers to maintain and communicate accurate patient medication information. Specifically, the section "Use Medicines Safely NPSG.03.06.01" states the following: "Maintain and communicate accurate patient medication information. The types of information that clinicians use to reconcile medications include (among others) medication name, dose, frequency, route, and purpose. Organizations should identify the information that needs to be collected to reconcile current and newly ordered medications and to safely prescribe medications in the future." (Joint Commission, 2015, retrieved at: http://www.jointcommission.org/assets/1/6/2015_NPSG_AHC1.PDF).

The National Quality Forum's 2010 update of the Safe Practices for Better Healthcare, states healthcare organizations must develop, reconcile, and communicate an accurate patient medication list throughout the continuum of care (p. 40).

Measure: 69v5: Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan



Measure Description:

Percentage of patients aged 18 years and older with a BMI documented during the current encounter or during the previous six months AND with a BMI outside of normal parameters, a follow-up plan is documented during the encounter or during the previous six months of the current encounter

Normal Parameters: Age 18 years and older BMI => 18.5 and < 25 kg/m2

Measure Definition:

BMI- Body mass index (BMI) is a number calculated using the Quetelet index: weight divided by height squared (W/H2) and is commonly used to classify weight categories. BMI can be calculated using:

Metric Units: BMI = Weight (kg) / (Height (m) x Height (m))

OR

English Units: BMI = Weight (lbs.) / (Height (in) x Height (in)) x 703

Follow-Up Plan - Proposed outline of treatment to be conducted as a result of a BMI out of normal parameters. A follow-up plan may include, but is not limited to: documentation of education, referral (for example a registered dietician, nutritionist, occupational therapist, physical therapist, primary care provider, exercise physiologist, mental health professional, or surgeon), pharmacological interventions, dietary supplements, exercise counseling or nutrition counseling.

Measure Guidance:

- There is no diagnosis associated with this measure.
- This measure is to be reported a minimum of once per reporting period for patients seen during the reporting period.
- This measure may be reported by eligible professionals who perform the quality actions described in the measure based on the services provided at the time of the qualifying visit and the measure-specific denominator coding.

BMI Measurement Guidance:

- Height and Weight - An eligible professional or their staff is required to measure both height and weight. Both height and weight must be measured within six months of the current encounter and may be obtained from separate encounters. Self-reported values cannot be used.
- The BMI may be documented in the medical record of the provider or in outside medical records obtained by the provider.

- If the most recent documented BMI is outside of normal parameters, then a follow-up plan is documented during the encounter or during the previous six months of the current encounter.
- If more than one BMI is reported during the measurement period, the most recent BMI will be used to determine if the performance has been met.
- Review the exclusions criteria to determine those patients that BMI measurement may not be appropriate or necessary.

Follow-Up Plan Guidance:

- The documented follow-up plan must be based on the most recent documented BMI, outside of normal parameters, example: "Patient referred to nutrition counseling for BMI above or below normal parameters."

(See Definitions for examples of follow-up plan treatments).

Variation has been noted in studies exploring optimal BMI ranges for the elderly (see Donini et al., (2012); Holme and Tonstad (2015); and Diehr et al. (2008). Notably however, all these studies have arrived at ranges that differ from the standard range for ages 18 and older, which is >=18.5 and < 25 kg/m2. For instance, both Donini et al. (2012) and Holme and Tonstad (2015) reported findings that suggest that higher BMI (higher than the upper end of 25kg/m2) in the elderly may be beneficial. Similarly, worse outcomes have been associated with being underweight (at a threshold higher than 18.5 kg/m2) at age 65 (Diehr et al. 2008). Because of optimal BMI range variation recommendations from these studies, no specific optimal BMI range for the elderly is used. However, It may be appropriate to exempt certain patients from a follow-up plan by applying the exception criteria. Review the following to apply the Medical Reason exception criteria:

The Medical Reason exception could include, but is not limited to, the following patients as deemed appropriate by the health care provider:

- Elderly Patients (65 or older) for whom weight reduction/weight gain would complicate other underlying health conditions such as the following examples:
    - Illness or physical disability
    - Mental illness, dementia, confusion
- Nutritional deficiency such as Vitamin/mineral deficiency*
- Patients in an urgent or emergent medical situation where time is of the essence and to delay treatment would jeopardize the patient's health status

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
All patients 18 and older on the date of the encounter with at least one eligible encounter during the measurement period	Equals Initial Population	Patients who are pregnant Patients receiving palliative care Patients who refuse measurement of height and/or weight or refuse follow-up	Patients with a documented BMI during the 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 current encounter	None

Denominator Exceptions:

Patients with a documented Medical Reason:

- Elderly Patients (65 or older) for whom weight reduction/weight gain would complicate other underlying health conditions such as the following examples:
  - Illness or physical disability
  - Mental illness, dementia, confusion
  - Nutritional deficiency, such as Vitamin/mineral deficiency

- Patients in an urgent or emergent medical situation where time is of the essence and to delay treatment would jeopardize the patient's health status

Value Sets / Data Criteria:

- "Diagnosis, Active: Pregnancy Dx" using "Pregnancy Dx Grouping Value Set (2.16.840.1.113883.3.600.1.1623)"
- "Encounter, Performed: BMI Encounter Code Set" using "BMI Encounter Code Set Grouping Value Set (2.16.840.1.113883.3.600.1.1751)"
- "Intervention, Order: Above Normal Follow-up" using "Above Normal Follow-up Grouping Value Set (2.16.840.1.113883.3.600.1.1525)"
- "Intervention, Order: Below Normal Follow up" using "Below Normal Follow up Grouping Value Set (2.16.840.1.113883.3.600.1.1528)"
- "Intervention, Order: Referrals where weight assessment may occur" using "Referrals where weight assessment may occur Grouping Value Set (2.16.840.1.113883.3.600.1.1527)"
- "Medication, Order: Above Normal Medications" using "Above Normal Medications RXNORM Value Set (2.16.840.1.113883.3.600.1.1498)"
- "Medication, Order: Below Normal Medications" using "Below Normal Medications RXNORM Value Set (2.16.840.1.113883.3.600.1.1499)"
- "Physical Exam, Performed: BMI LOINC Value" using "BMI LOINC Value LOINC Value Set (2.16.840.1.113883.3.600.1.681)"

- "Physical Exam, Performed not done: Medical or Other reason not done" using "Medical or Other reason not done SNOMEDCT Value Set (2.16.840.1.113883.3.600.1.1502)"
- "Physical Exam, Performed not done: Patient Reason refused" using "Patient Reason refused SNOMEDCT Value Set (2.16.840.1.113883.3.600.791)"
- "Procedure, Order: Palliative Care" using "Palliative Care Grouping Value Set (2.16.840.1.113883.3.600.1.1579)"
- Attribute: "Reason: Underweight" using "Underweight SNOMEDCT Value Set (2.16.840.1.113883.3.600.2388)"
- Attribute: "Reason: Overweight" using "Overweight SNOMEDCT Value Set (2.16.840.1.113883.3.600.2387)"

Credible Form Additions:

Please note: *2017 eCQI standards have modified this measure to include new exclusions and exceptions as well as how the reporting of the follow-up plan is documented.*

The following questions / answer combinations for this measure are *examples* of choices available – how your agency and service delivery model utilize the follow-up parameters for this clinical quality measure may differ. Please use the Value Set Authority Center as the resource for your choices for above- or below-normal follow up and other measure value sets.

Question: BMI Above Normal Follow-up: Giving encouragement to exercise (procedure) (SNOMEDCT 304549008)

- Performed (SNOMEDCT 398166005)
- Not performed due to Medical contraindication (finding) (SNOMEDCT 397745006)
- Not performed due to Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Treatment not tolerated (situation) (SNOMEDCT 407563006)
- Not performed due to Procedure not indicated (situation) (SNOMEDCT 428119001)

Question: BMI Above Normal Follow-up: Dietary management education, guidance, and counseling (procedure) (SNOMEDCT 424753004)

- Performed (SNOMEDCT 398166005)
- Not performed due to Medical contraindication (finding) (SNOMEDCT 397745006)
- Not performed due to Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Treatment not tolerated (situation) (SNOMEDCT 407563006)
- Not performed due to Procedure not indicated (situation) (SNOMEDCT 428119001)

Additional 'Above Normal Follow-up' question/answer sets can be configured utilizing choices from the CQM Value Set "Above Normal Follow-up Grouping Value Set (2.16.840.1.113883.3.600.1.1525)"

Question: BMI Below Normal Follow-up: Prescribed diet education (procedure) (SNOMEDCT 386464006)

- Performed (SNOMEDCT 398166005)
- Not performed due to Medical contraindication (finding) (SNOMEDCT 397745006)
- Not performed due to Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Treatment not tolerated (situation) (SNOMEDCT 407563006)
- Not performed due to Procedure not indicated (situation) (SNOMEDCT 428119001)

Question: BMI Below Normal Follow-up: Dietary education for weight gain (procedure) (SNOMEDCT 429095004)

- Performed (SNOMEDCT 398166005)
- Not performed due to Medical contraindication (finding) (SNOMEDCT 397745006)
- Not performed due to Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Treatment not tolerated (situation) (SNOMEDCT 407563006)
- Not performed due to Procedure not indicated (situation) (SNOMEDCT 428119001)

Additional 'Below Normal Follow-up' question/answer sets can be configured utilizing choices from the CQM Value Set "Below Normal Follow up Grouping Value Set (2.16.840.1.113883.3.600.1.1528)"

Question: Referrals where weight assessment may occur - Referral to community-based dietitian (procedure) (SNOMEDCT 306353006)

- Due to: Overweight (finding) (SNOMEDCT 238131007)
- Due to: Underweight (finding) (SNOMEDCT 248342006)
- Not performed due to Medical contraindication (finding) (SNOMEDCT 397745006)
- Not performed due to Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Treatment not tolerated (situation) (SNOMEDCT 407563006)
- Not performed due to Procedure not indicated (situation) (SNOMEDCT 428119001)

Question: Palliative Care - Hospice care (regime/therapy) (SNOMEDCT 385763009)

- Performed (SNOMEDCT 398166005)
- Not performed due to Medical contraindication (finding) (SNOMEDCT 397745006)
- Not performed due to Procedure not indicated (situation) (SNOMEDCT 428119001)

Question: Physical exam with height & weight performed? (LOINC 39156-5)

- Refusal of treatment by patient (situation) (SNOMEDCT 105480006)
- Procedure refused (situation) (SNOMEDCT 105480006)
- Procedure refused for religious reason (situation) (SNOMEDCT 183945002)
- Patient non-compliant - refused service (situation) (SNOMEDCT 413312003)

Population Criteria:

- **Initial Population =**
  - AND: Age>= 18 year(s) at: "Occurrence A of Encounter, Performed: BMI Encounter Code Set"

- AND: "Occurrence A of Encounter, Performed: BMI Encounter Code Set" during "Measurement Period"

- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - OR: Union of:
    - "Intervention, Order: Palliative Care" starts before end of "Occurrence A of Encounter, Performed: BMI Encounter Code Set"
    - "Physical Exam, Performed not done: Patient Reason refused" for "BMI LOINC Value" during "Occurrence A of Encounter, Performed: BMI Encounter Code Set"
    - "Diagnosis: Pregnancy Dx" overlaps "Measurement Period"
- **Numerator =**
  - AND:
    - OR: "Physical Exam, Performed: BMI LOINC Value" satisfies all:
      - Most Recent: (result) <= 6 month(s) starts before end of "Occurrence A of Encounter, Performed: BMI Encounter Code Set"
      - (result >= 18.5 kg/m2)
      - (result < 25 kg/m2)
    - OR:
      - AND: Union of:
        - "Intervention, Order: Above Normal Follow-up (reason: Overweight)"
        - "Intervention, Order: Referrals where weight assessment may occur (reason: Overweight)"
        - "Medication, Order: Above Normal Medications (reason: Overweight)"
        - <= 6 month(s) starts before end of "Occurrence A of Encounter, Performed: BMI Encounter Code Set"
      - AND: "Physical Exam, Performed: BMI LOINC Value" satisfies all:
        - Most Recent: (result) <= 6 month(s) starts before end of "Occurrence A of Encounter, Performed: BMI Encounter Code Set"
        - (result >= 25 kg/m2)
    - OR:
      - AND: Union of:
        - "Intervention, Order: Below Normal Follow up (reason: Underweight)"
        - "Intervention, Order: Referrals where weight assessment may occur (reason: Underweight)"
        - "Medication, Order: Below Normal Medications (reason: Underweight)"
        - <= 6 month(s) starts before end of "Occurrence A of Encounter, Performed: BMI Encounter Code Set"
      - AND: "Physical Exam, Performed: BMI LOINC Value" satisfies all:
        - Most Recent: (result) <= 6 month(s) starts before end of "Occurrence A of Encounter, Performed: BMI Encounter Code Set"
        - (result < 18.5 kg/m2)
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - OR: Union of:
    - "Intervention, Order not done: Medical or Other reason not done" for "Above Normal Follow-up"
    - "Intervention, Order not done: Medical or Other reason not done" for "Referrals where weight assessment may occur"
    - "Medication, Order not done: Medical or Other reason not done" for "Above Normal Medications"
    - "Intervention, Order not done: Medical or Other reason not done" for "Below Normal Follow up"
    - "Medication, Order not done: Medical or Other reason not done" for "Below Normal Medications"
    - <= 6 month(s) starts before end of "Occurrence A of Encounter, Performed: BMI Encounter Code Set"
- **Stratification =**
  - None

Rationale:

BMI Above Normal Parameters

Obesity continues to be a costly public health concern in the United States. This is because obesity is associated with several comorbid health problems including increased risk for coronary artery disease, type 2 diabetes, various types of cancer, gallstones and disability. These comorbid conditions are associated with higher medical care utilization and costs among obese patients (Moyer, 2012, p. 373). Padula, Allen & Nair (2014) examined data from a commercial claims and encounter database to estimate the cost for obesity and associated comorbidities between 2006-2007 and found that on the average, obesity contributed to $1907 more in cost per patient per visit for inpatient and outpatient claims, while the increase in cost for comorbidities ranged from $527 for obesity with congestive heart failure (CHF) to $15, 733 for the combination of obesity, diabetes mellitus, hypertension and depression. Similarly, data from 2006 show that per capita annual medical spending costs attributable to obesity are higher by $1,429 (42 percent) when compared to per capita costs attributable to normal weight patients. The national aggregate cost for obesity related costs (across all payers) was estimated to be equivalent to $147 billion using 2008 dollars (Finkelstein, Trogdon, Cohen & Dietz, 2009). Obesity is also associated with an increased risk of death, particularly in adults younger than age 65 years and has been shown to reduce life expectancy by 6 to 20 years depending on age and race (LeBlanc et al., 2011; Masters et al., 2013)

Against this background of high obesity related costs, CDC 2009 data showed that all states were still lagging behind the Healthy People 2010 obesity target of 15 percent and that the self-reported overall prevalence of obesity among adults had increased 1.1 percentage points in 2007 to 26.7 percent (2010). Most recent data shows that the prevalence of BMI-defined obesity in adults continues to exceed 30% (34.9 overall) and highest among middle-aged adults (34.9). The findings also revealed the prevalence of obesity being higher among black adult women (56.6%) compared with 37.1% of black adult men (Ogden, Carroll, Kit and Flegel, 2013). Despite the high obesity prevalence, and related costs, less than 50% of obese adults in 2010 received advice to exercise or perform physical activity (Barnes & Schoenborn, 2012) indicating a gap in care for a high impact disease condition.

Screening for BMI and follow-up therefore is critical to closing this gap and contributes to quality goals of population health and cost reduction. However, due to concerns for other underlying conditions (such as bone health) or nutrition related deficiencies providers are cautioned to use clinical judgment and take these into account when considering weight management programs for overweight patients, especially the elderly (NHLBI Obesity Education Initiative, 1998, p. 91).

BMI below Normal Parameters

On the other end of the body weight spectrum is underweight (BMI <18.5 kg/m2), which is equally detrimental to population health. When compared to normal weight individuals (BMI 18.5-25 kg/m2), underweight individuals have significantly higher death rates with a Hazard Ratio of 2.27 and 95% confidence intervals (CI) = 1.78, 2.90 (Borrell & Lalitha (2014).

Poor nutrition or underlying health conditions can result in underweight (Fryer & Ogden, 2012). The National Health and Nutrition Examination Survey (NHANES) results from the 2007-2010 indicate that women are more likely to be underweight than men (2012). Therefore, patients should be equally screened for underweight and followed up with nutritional counselling to reduce mortality and morbidity associated with underweight.

Clinical Recommendation Statement:

The US Preventive Health Services Task Force (USPSTF) recommends that clinicians screen all adults (aged 18 years and older) for obesity. Clinicians should offer or refer patients with a BMI of 30 or higher to intensive, multicomponent behavioral interventions. This is a B recommendation (Moyer, 2012).

As cited in Wilkinson et al. (2013), the Institute for Clinical Systems Improvement (ICSI) Preventive Services for Adults, Obesity Screening (Level II) Recommendation provides the following guidance:

- Record height, weight and calculate body mass index at least annually

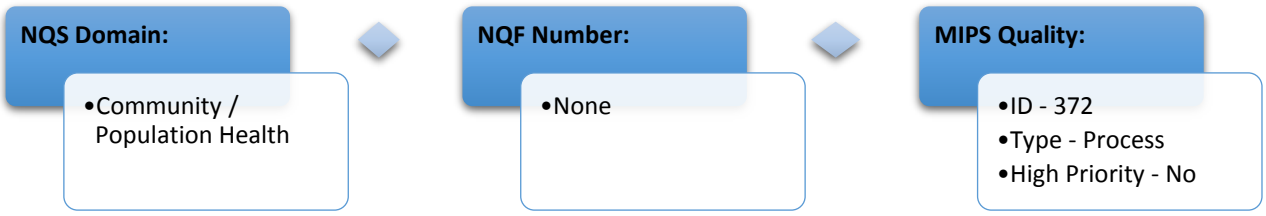
    - Clinicians should consider waist circumference measurement to estimate disease risk for patients who have BMI scores indicative of overweight or obesity class I. For adult patients with a BMI of 25 to 34.9 kg/m2, sex-specific waist circumference cutoffs should be used in conjunction with BMI to identify increased disease risk.
- A BMI greater or equal to 30 is defined as obese
- A BMI of 25-29 is defined as overweight
- Intensive intervention for obese individuals, based on BMI, is recommended by the U.S. Preventive Services to help control weight

Similarly, the 2013 joint report/guideline from the American Heart Association, American College of Cardiology and the Obesity Society also recommend measuring height and weight and calculating BMI at annual visits or more frequently, using the current cut-points for overweight (BMI >25.0-29.9 kg/m2) and obesity (BMI >=30 kg/m2) to identify adults who may be at elevated risk of mortality from all causes. They also recommended counseling overweight and obese individuals on their increased risk for CVD, type 2 diabetes, and all-cause mortality, and need for lifestyle changes.

Nutritional safety for the elderly should be considered when recommending weight reduction. "A clinical decision to forego obesity treatment in older adults should be guided by an evaluation of the potential benefits of weight reduction for day-to-day functioning and reduction of the risk of future cardiovascular events, as well as the patient's motivation for weight reduction. Care must be taken to ensure that any weight reduction program minimizes the likelihood of adverse effects on bone health or other aspects of nutritional status" Evidence Category D. (NHLBI Obesity Education Initiative, 1998, p. 91). In addition, weight reduction prescriptions in older persons should be accompanied by proper nutritional counseling and regular body weight monitoring. (NHLBI Obesity Education Initiative, 1998, p. 91).

The possibility that a standard approach to weight loss will work differently in diverse patient populations must be considered when setting expectations about treatment outcomes. Evidence Category B. (NHLBI Obesity Education Initiative, 1998).

Measure: 82v4: Maternal Depression Screening



Measure Description:

The percentage of children who turned 6 months of age during the measurement year, who had a face-to-face visit between the clinician and the child during child's first 6 months, and who had a maternal depression screening for the mother at least once between 0 and 6 months of life.

Measure Definition:

None

Measure Guidance:

The eMeasure specifies only patient's record, looking for the newly allocated SNOMED codes that allow providers to record the screening and treatment of the mother, but the endorsed measure relies on notes from the patient's and mother's charts.

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Children with a visit who turned 6 months of age in the measurement period.	Equals Initial Population	None	Children with documentation of maternal screening or treatment for postpartum depression for the mother.	None

Value Sets / Data Criteria:

- "Encounter, Performed: BH Medical or psychiatric consultation" using "BH Medical or psychiatric consultation Grouping Value Set (2.16.840.1.113883.3.1257.1.1652)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Intervention, Performed: Maternal Post Partum Depression Care" using "Maternal Post Partum Depression Care Grouping Value Set (2.16.840.1.113883.3.464.1003.111.12.1013)"

- "Intervention, Performed: Maternal Post Partum Depression Screening" using "Maternal Post Partum Depression Screening Grouping Value Set (2.16.840.1.113883.3.464.1003.111.12.1014)"

Credible Form Additions:

The following coded form questions are necessary to capture the documentation that the EP performed a maternal postpartum depression care screening (regime or therapy). The question itself is coded as are the two choices.

SNOMEDCT Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Question: Maternal postpartum depression care (regime/therapy) performed? (SNOMEDCT 428231000124106)

- Yes (SNOMEDCT 398166005)
- No (SNOMEDCT 262008008)

Question: Maternal postpartum depression screening (procedure) performed? (SNOMEDCT 428221000124108)

- Yes (SNOMEDCT 398166005)
- No (SNOMEDCT 262008008)

Population Criteria:

- **Initial Population =**
  - AND:
    - OR: "Birthdate : Patient Characteristic Birthdate" <= 5 month(s) starts before start of "Measurement Period"
    - OR:
      - AND: "Birthdate : Patient Characteristic Birthdate" starts after start of "Measurement Period"
      - AND: "Birthdate : Patient Characteristic Birthdate" >= 6 month(s) starts before end of "Measurement Period"
  - AND: Union of:
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: BH Medical or psychiatric consultation"
    - <= 6 month(s) ends after start of "Birthdate : Patient Characteristic Birthdate"
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND: Union of:
    - "Intervention, Performed: Maternal Post Partum Depression Care"
    - "Intervention, Performed: Maternal Post Partum Depression Screening"
    - <= 6 month(s) ends after start of "Birthdate : Patient Characteristic Birthdate"
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**

- None

Rationale:

Maternal depression, also known as post-partum depression, is one of the most common perinatal complications; however, the disorder often remains unrecognized, undiagnosed, and untreated (VanLandeghem, 2006). Studies suggest that over 10 percent of mothers experience depression six weeks after giving birth, whether it is minor or major. Three to 25 percent of women experience major depression during the year following childbirth (Gaynes BN, 2005; Kessler RC, 1994). The incidence of depression may be higher in women who already have young children (VanLandeghem, 2006; Gaynes BN, 2005). Maternal depression can greatly affect mothers, their baby, and their family's well-being. It can have lasting effects on a mother's self-esteem and confidence as a mother (Epperson, 1999).

Screening is important, as mothers with post-partum depression who are not treated can have symptoms that carry over into the second year post-partum. Mothers that have had post-partum depression are also more likely to have a recurrence with subsequent children. (Epperson, 1999). There are effective treatments available, but less than half of post-partum depression cases are ever diagnosed (Gibson, 2010). Less than 50 percent of mothers with an infant child are currently being screened for post-partum depression (Gjerdingen, Crow, McGovern, Miner, Center, 2009). This measure encourages clinicians to screen new mothers for depression.

Clinical Recommendation Statement:

U.S. Preventive Services Task Force (2002)
The USPSTF recommends screening for depression in clinical practices that have systems in place to assure accurate diagnosis, effective treatment, and follow up for the general adult population*
Grade: B Recommendation
*NOTE: This recommendation applies to all adults.

Bright Futures (2008)
Health care professionals should screen mothers on the following topics:

Mothers of one week old infants:

- Discuss health and depression, family stress, uninvited advice, parent role.
- Differentiate between short-term "baby blues" and postpartum depression, and counsel and refer as appropriate:
- It may be helpful to advise women that the "postpartum blues" are a different entity from depression. The "blues," with characteristic tearfulness, anxiety and low mood, are relatively common but are transient, peaking at 3-5 days after birth and resolving by 10-14 days.

Mothers of one month old infants:

- Discuss maternal health (postpartum, checkup, depression, substance abuse)

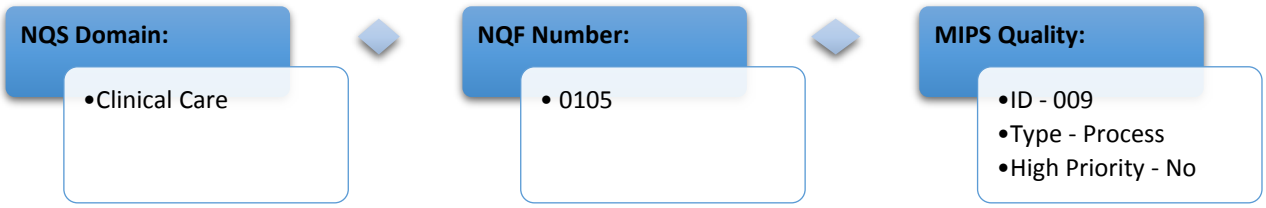
Mothers of two-month-old children:

- Discuss maternal health (maternal postpartum, checkup and resumption of activities, depression)
- Grade: Expert Consensus

References

U.S. Preventive Services Task Force. Screening for Depression, May 2002.
Hagan, JF, Shaw JS, Duncan PM, eds. 2008. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, Third Edition. Elk Grove, IL: American Academy of Pediatrics

Measure: 128v5: Anti-depressant Medication Management



Measure Description:

Percentage of patients 18 years of age and older who were treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment. Two rates are reported.

a. Percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks).

b. Percentage of patients who remained on an antidepressant medication for at least 180 days (6 months).

Measure Definition:

Index Prescription Start Date (IPSD): The earliest prescription dispensing event for an antidepressant medication during the period of 270 days prior to the start of the measurement period through 90 days after the start of the measurement period.

The "continuous treatment" described in this measure allows for gaps in medication treatment up to a total 30 days during the 114-day period (numerator 1) or 51 days during the 231-day period (numerator 2). Gaps can include either gaps used to change medication, or treatment gaps to refill the same medication.

Measure Guidance:

To identify new treatment episodes for major depression, there must be a 90-day negative medication history (a period during which the patient was not taking antidepressant medication) prior to the first *dispensing* event associated with the Index Episode Start Date (Index Prescription Start Date).

CUMULATIVE MEDICATION DURATION is an individual's total number of medication days over a specific period; the period counts multiple prescriptions with gaps in between, but does not count the gaps during which a medication was not *dispensed*.

To determine the cumulative medication duration, determine first the number of the Medication Days for each prescription in the period: the number of doses divided by the dose frequency per day. Then add the Medication Days for each prescription without counting any days between the prescriptions.

For example, there is an original prescription for 30 days with 2 refills for thirty days each. After a gap of 3 months, the medication was prescribed again for 60 days with 1 refill for 60 days. The cumulative medication duration is (30 x 3) + (60 x 2) = 210 days over the 10-month period.

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Patients 18 years of age and older with a visit during the measurement period who were <u>dispensed</u> antidepressant medications in the time within 270 days (9 months) prior to the measurement period through the first 90 days (3 months) of the measurement period, and were diagnosed with major depression 60 days prior to, or 60 days after the <u>dispensing</u> event	Equals Initial Population	Patients who were actively on an antidepressant medication in the 105 days prior to the Index Prescription Start Date	**Numerator 1:** Patients who have received antidepressant medication for at least 84 days (12 weeks) of continuous treatment during the 114-day period following the Index Prescription Start Date **Numerator 2:** Patients who have received antidepressant medications for at least 180 days (6 months) of continuous treatment during the 231-day period following the Index Prescription Start Date	None

Denominator Exceptions:

None.

Value Sets / Data Criteria:

- "Diagnosis: Major Depression" using "Major Depression Grouping Value Set (2.16.840.1.113883.3.464.1003.105.12.1007)"
- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit Grouping Value Set (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up" using "Preventive Care Services - Established Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up" using "Preventive Care Services-Initial Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1023)"

- "Encounter, Performed: Psych Visit - Diagnostic Evaluation" using "Psych Visit - Diagnostic Evaluation Grouping Value Set (2.16.840.1.113883.3.526.3.1492)"
- "Encounter, Performed: Psych Visit - Psychotherapy" using "Psych Visit - Psychotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1496)"
- "Medication, Active: Antidepressant Medication" using "Antidepressant Medication Grouping Value Set (2.16.840.1.113883.3.464.1003.196.12.1213)"
- "Medication, Dispensed: Antidepressant Medication" using "Antidepressant Medication Grouping Value Set (2.16.840.1.113883.3.464.1003.196.12.1213)"
-

Credible Form Additions:

None.

Population Criteria:

- **------ Population Criteria 1 ------**

- **Initial Population =**
  - AND: Age>= 18 year(s) at: "Measurement Period"
  - AND: $InitialMajDepressionDiagnosis
  - AND: $InitialDepMedication
  - AND: Union of:
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
    - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
    - "Encounter, Performed: Home Healthcare Services"
    - "Encounter, Performed: Annual Wellness Visit"
    - "Encounter, Performed: Psych Visit - Diagnostic Evaluation"
    - "Encounter, Performed: Psych Visit - Psychotherapy"
    - during "Measurement Period"
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - OR: "Medication, Active: Antidepressant Medication" <= 105 day(s) starts before start of $InitialDepMedication
- **Numerator =**
  - AND: Sum>= 84 day(s): "Medication, Active: Antidepressant Medication (cumulative medication duration)" <= 114 day(s) ends after start of $InitialDepMedication
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**
  - None

- **------ Population Criteria 2 ------**

- **Initial Population =**
  - AND: Age>= 18 year(s) at: "Measurement Period"
  - AND: $InitialMajDepressionDiagnosis
  - AND: $InitialDepMedication
  - AND: Union of:

        - "Encounter, Performed: Office Visit"
        - "Encounter, Performed: Face-to-Face Interaction"
        - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
        - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
        - "Encounter, Performed: Home Healthcare Services"
        - "Encounter, Performed: Annual Wellness Visit"
        - "Encounter, Performed: Psych Visit - Diagnostic Evaluation"
        - "Encounter, Performed: Psych Visit - Psychotherapy"
        - during "Measurement Period"
- **Denominator =**
    - AND: Initial Population
- **Denominator Exclusions =**
    - OR: "Medication, Active: Antidepressant Medication" <= 105 day(s) starts before start of $InitialDepMedication
- **Numerator =**
    - AND: Sum>= 180 day(s): "Medication, Active: Antidepressant Medication (cumulative medication duration)" <= 231 day(s) ends after start of $InitialDepMedication
- **Numerator Exclusions =**
    - None
- **Denominator Exceptions =**
    - None
- **Stratification =**
    - None

- **$InitialDepMedication =**
    - First:
        - "Medication, Dispensed: Antidepressant Medication" satisfies any:
            - <= 270 day(s) starts before or concurrent with start of "Measurement Period"
            - <= 90 day(s) starts after start of "Measurement Period"
- **$InitialMajDepressionDiagnosis =**
    - First:
        - "Diagnosis: Major Depression" satisfies any:
            - <= 60 day(s) starts before start of $InitialDepMedication
            - <= 60 day(s) starts after start of $InitialDepMedication

Rationale:

In 2013, over 15 million adults in the United States had at least one major depressive episode in the past 12 months (National Institute of Mental Health 2013), and depression is estimated to affect nearly a quarter of adults in their lifetime (Burcusa and Iacono 2007). Symptoms of depression include appetite and sleep disturbances, anxiety, irritability and decreased concentration (Charbonneau et al. 2005). The American Psychiatric Association recommends use of antidepressant medication and behavioral therapies, such as psychotherapy, to treat depression (American Psychiatric Association 2010).

For the past 50 years, antidepressant medication has proven to be effective especially for patients with more severe symptoms (Fournier et al. 2010). Among patients who initiate antidepressant treatment, one in three discontinues treatment within one month, before the effect of medication can be assessed, and nearly one in two discontinues treatment within three months (Simon 2002).

Due to increased risky behaviors for chronic disease (eg, physical inactivity, smoking, excessive drinking and insufficient sleep), evidence has shown that depressive disorders are strongly related to the occurrence of many chronic diseases including diabetes, cancer, cardiovascular disease and asthma (Centers for Disease Control and Prevention 2011).

Aligning depression quality improvement with methods used in managing other chronic illnesses has been an important step in depression care. Depression management systems have demonstrated improved short- and long-term outcomes of depression severity and persistence, employment retention, functional status and patient satisfaction (Katon et al. 2002; Rost et al. 2001).

Clinical Recommendation Statement:

American Psychiatric Association (APA 2010):
Successful treatment of patients with major depressive disorder is promoted by a thorough assessment of the patient and close adherence to treatment plans. Treatment consists of an acute phase, during which remission is induced; a continuation phase, during which remission is preserved; and a maintenance phase, during which the susceptible patient is protected against the recurrence of a subsequent major depressive episode.

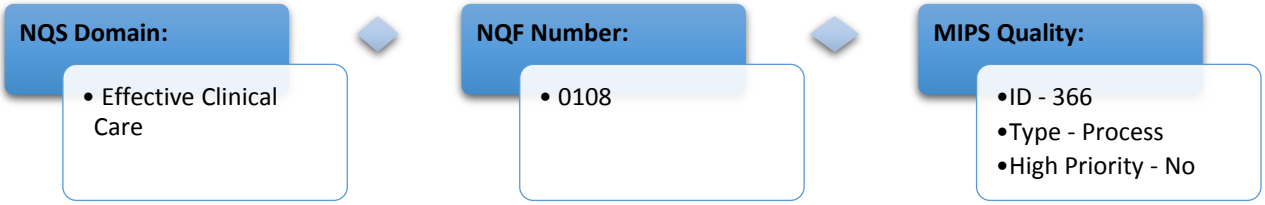
Acute Phase: An antidepressant medication is recommended as an initial treatment choice for patients with mild to moderate major depressive disorder [I: Recommended with substantial clinical confidence] and definitely should be provided for those with severe major depressive disorder unless electroconvulsive therapy (ECT) is planned [I: Recommended with substantial clinical confidence]. For most patients, a selective serotonin reuptake inhibitor (SSRI), serotonin norepinephrine reuptake inhibitor (SNRI), mirtazapine, or bupropion is optimal [I: Recommended with substantial clinical confidence]. In general, the use of nonselective monoamine oxidase inhibitors (MAOIs) (e.g., phenelzine, tranylcypromine, isocarboxazid) should be restricted to patients who do not respond to other treatments [I: Recommended with substantial clinical confidence], given the necessity for dietary restrictions with these medications and the potential for deleterious drug-drug interactions.

During the acute phase of treatment, patients should be carefully and systematically monitored on a regular basis to assess their response to pharmacotherapy, identify the emergence of side effects (e.g., gastrointestinal symptoms, sedation, insomnia, activation, changes in weight, and cardiovascular, neurological, anticholinergic, or sexual side effects), and assess patient safety [I: Recommended with substantial clinical confidence]. If antidepressant side effects do occur, an initial strategy is to lower the dose of the antidepressant or to change to an antidepressant that is not associated with that side effect [I: Recommended with substantial clinical confidence].

Continuation Phase: During the continuation phase of treatment, the patient should be carefully monitored for signs of possible relapse [I: Recommended with substantial clinical confidence]. Systematic assessment of symptoms, side effects, adherence, and functional status is essential [I: Recommended with substantial clinical confidence], and may be facilitated through the use of clinician- and/or patient-administered rating scales [II: Recommended with moderate clinical confidence]. To reduce the risk of relapse, patients who have been treated successfully with antidepressant medications in the acute phase should continue treatment with these agents for 4–9 months [I: Recommended with substantial clinical confidence]. In general, the dose used in the acute phase should be used in the continuation phase [II: Recommended with moderate clinical confidence]. To prevent a relapse of depression in the continuation phase, depression-focused psychotherapy is recommended [I: Recommended with substantial clinical confidence], with the best evidence available for cognitive-behavioral therapy.

Maintenance Phase: During the maintenance phase, an antidepressant medication that produced symptom remission during the acute phase and maintained remission during the continuation phase should be continued at a full therapeutic dose [II: Recommended with moderate clinical confidence].

Measure: 136v6: ADHD: Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication



Measure Description:

Percentage of children 6-12 years of age and newly dispensed a medication for attention-deficit/hyperactivity disorder (ADHD) who had appropriate follow-up care. Two rates are reported.

a. *Percentage of children who had one follow-up visit with a practitioner with prescribing authority during the 30-Day Initiation Phase.*

b. *Percentage of children who remained on ADHD medication for at least 210 days and who, in addition to the visit in the Initiation Phase, had at least two additional follow-up visits with a practitioner within 270 days (9 months) after the Initiation Phase ended.*

Measure Definition:

Intake Period: The five-month period starting 90 days prior to the start of the measurement period and ending 60 days after the start of the measurement period.

Index Prescription Start Date (IPSD): The earliest prescription *dispensing* date for an ADHD medication where the date is in the Intake Period and an ADHD medication was not *dispensed* during the 120 days prior.

Initiation Phase: The 30 days following the IPSD.

Continuation and Maintenance Phase: The 31-300 days following the IPSD.

Measure Guidance:

CUMULATIVE MEDICATION DURATION is an individual's total number of medication days over a specific period; the period counts multiple prescriptions with gaps in between, but does not count the gaps during which a medication was not *dispensed*.

To determine the cumulative medication duration, determine first the number of the medication Days for each prescription in the period: the number of doses divided by the dose frequency per day. Then add the Medication Days for each prescription without counting any days between the prescriptions.

For example, there is an original prescription for 30 days with 2 refills for thirty days each. After a gap of 3 months, the medication was prescribed again for 60 days with 1 refill for 60 days. The cumulative medication duration is (30 x 3) + (60 x 2) = 210 days over the 10-month period.

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Initial Population 1: Children 6-12 years of age who were dispensed an ADHD medication during the Intake Period and who had a visit during the measurement period. **Initial Population 2: Children 6-12 years of age who were dispensed an ADHD medication during the Intake Period and who remained on the medication for at least 210 days out of the 300 days following the IPSD, and who had a visit during the measurement period.**	Equals Initial Population	**Denominator Exclusion 1:** Exclude patients diagnosed with narcolepsy at any point in their history or during the measurement period. Exclude patients who had an acute inpatient stay with a principal diagnosis of mental health or substance abuse during the 30 days after the IPSD. Exclude patients who were actively on an ADHD medication in the 120 days prior to the Index Prescription Start Date. **Denominator Exclusion 2:** Exclude patients diagnosed with narcolepsy at any point in their history or during the measurement period. Exclude patients who had an acute inpatient stay with a principal diagnosis of mental health or substance abuse	**Numerator 1:** Patients who had at least one face-to-face visit with a practitioner with prescribing authority within 30 days after the IPSD **Numerator 2:** Patients who had at least one face-to-face visit with a practitioner with prescribing authority during the Initiation Phase, and at least two follow-up visits during the Continuation and Maintenance Phase. One of the two visits during the Continuation and Maintenance Phase may be a telephone visit with a practitioner.	None

		during the 300 days after the IPSD. Exclude patients who were actively on an ADHD medication in the 120 days prior to the Index Prescription Start Date.		

Denominator Exceptions:

None.

Value Sets / Data Criteria:

- "Diagnosis: Narcolepsy" using "Narcolepsy Grouping Value Set (2.16.840.1.113883.3.464.1003.114.12.1011)"
- "Encounter, Performed: Behavioral Health Follow-up Visit" using "Behavioral Health Follow-up Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1054)"
- "Encounter, Performed: Discharge Services- Observation Care" using "Discharge Services- Observation Care Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1039)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Hospital Observation Care - Initial" using "Hospital Observation Care - Initial Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1002)"
- "Encounter, Performed: Inpatient Encounter" using "Inpatient Encounter Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1060)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Outpatient Consultation" using "Outpatient Consultation Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1008)"
- "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17" using "Preventive Care - Established Office Visit, 0 to 17 Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1024)"
- "Encounter, Performed: Preventive Care Services - Group Counseling" using "Preventive Care Services - Group Counseling Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1027)"
- "Encounter, Performed: Preventive Care Services-Individual Counseling" using "Preventive Care Services-Individual Counseling Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1026)"
- "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17" using "Preventive Care- Initial Office Visit, 0 to 17 Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1022)"
- "Encounter, Performed: Psych Visit - Diagnostic Evaluation" using "Psych Visit - Diagnostic Evaluation Grouping Value Set (2.16.840.1.113883.3.526.3.1492)"
- "Encounter, Performed: Psych Visit - Psychotherapy" using "Psych Visit - Psychotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1496)"
- "Encounter, Performed: Psychotherapy and Pharmacologic Management" using "Psychotherapy and Pharmacologic Management Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1055)"
- "Encounter, Performed: Telehealth Services" using "Telehealth Services Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1031)"

- "Encounter, Performed: Telephone Management" using "Telephone Management Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1053)"
- "Medication, Active: ADHD Medications" using "ADHD Medications Grouping Value Set (2.16.840.1.113883.3.464.1003.196.12.1171)"
- "Medication, Dispensed: ADHD Medications" using "ADHD Medications Grouping Value Set (2.16.840.1.113883.3.464.1003.196.12.1171)"
- Attribute: "Principal diagnosis: Substance Abuse" using "Substance Abuse Grouping Value Set (2.16.840.1.113883.3.464.1003.106.12.1004)"
- Attribute: "Principal diagnosis: Mental Health Diagnoses" using "Mental Health Diagnoses Grouping Value Set (2.16.840.1.113883.3.464.1003.105.12.1004)"
- Attribute: "Facility location: Ambulatory" using "Ambulatory Grouping Value Set (2.16.840.1.113883.3.464.1003.122.12.1003)"

Credible Form Additions:

None.

Population Criteria:

- **------ Population Criteria 1 ------**

- **Initial Population =**
  - AND: $InitialADHDMedication
  - AND: Age>= 6 year(s) at: "Measurement Period"
  - AND: Age< 12 year(s) at: "Measurement Period"
  - AND: $Encounter
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - OR: "Diagnosis: Narcolepsy" starts before end of "Measurement Period"
  - OR: Union of:
    - "Encounter, Performed: Inpatient Encounter (principal diagnosis: Mental Health Diagnoses)" <= 30 day(s) starts after end of $InitialADHDMedication
    - "Encounter, Performed: Inpatient Encounter (principal diagnosis: Substance Abuse)" <= 30 day(s) starts after end of $InitialADHDMedication
  - OR: "Medication, Active: ADHD Medications" <= 120 day(s) starts before start of $InitialADHDMedication
- **Numerator =**
  - AND: $Encounter30DaysAfterInitialADHDMed
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**
  - None
- **------ Population Criteria 2 ------**

- **Initial Population =**
  - AND: $InitialADHDMedication
  - AND: Sum>= 210 day(s): "Medication, Active: ADHD Medications (cumulative medication duration)" <= 300 day(s) starts after or concurrent with start of $InitialADHDMedication
  - AND: Age>= 6 year(s) at: "Measurement Period"
  - AND: Age< 12 year(s) at: "Measurement Period"
  - AND: $Encounter

- **Denominator =**
    - AND: Initial Population
- **Denominator Exclusions =**
    - OR: "Diagnosis: Narcolepsy" starts before end of "Measurement Period"
    - OR: Union of:
        - "Encounter, Performed: Inpatient Encounter (principal diagnosis: Mental Health Diagnoses)" <= 300 day(s) starts after end of $InitialADHDMedication
        - "Encounter, Performed: Inpatient Encounter (principal diagnosis: Substance Abuse)" <= 300 day(s) starts after end of $InitialADHDMedication
    - OR: "Medication, Active: ADHD Medications" <= 120 day(s) starts before start of $InitialADHDMedication
- **Numerator =**
    - AND: $Encounter30DaysAfterInitialADHDMed
    - AND:
        - OR: Count>= 2 : $EncounterAfterInitialMedication
        - OR:
            - AND: $EncounterAfterInitialMedication
            - AND: Union of:
                - "Encounter, Performed: Telehealth Services" satisfies all:
                    - >= 31 day(s) ends after end of $InitialADHDMedication
                    - <= 300 day(s) ends after end of $InitialADHDMedication
                - "Encounter, Performed: Telephone Management" satisfies all:
                    - >= 31 day(s) ends after end of $InitialADHDMedication
                    - <= 300 day(s) ends after end of $InitialADHDMedication
- **Numerator Exclusions =**
    - None
- **Denominator Exceptions =**
    - None
- **Stratification =**
    - None

Data Criteria (QDM Variables)

- **$Encounter =**
    - Union of:
        - "Encounter, Performed: Office Visit"
        - "Encounter, Performed: Face-to-Face Interaction"
        - "Encounter, Performed: Home Healthcare Services"
        - "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17"
        - "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17"
        - during "Measurement Period"
- **$Encounter30DaysAfterInitialADHDMed =**
    - Union of:
        - "Encounter, Performed: Office Visit"
        - "Encounter, Performed: Hospital Observation Care - Initial"
        - "Encounter, Performed: Preventive Care Services - Group Counseling"
        - "Encounter, Performed: Behavioral Health Follow-up Visit"
        - "Encounter, Performed: Preventive Care Services-Individual Counseling"
        - "Encounter, Performed: Psychotherapy and Pharmacologic Management (facility location: Ambulatory)"
        - "Encounter, Performed: Face-to-Face Interaction"
        - "Encounter, Performed: Discharge Services- Observation Care"
        - "Encounter, Performed: Outpatient Consultation"
        - "Encounter, Performed: Home Healthcare Services"
        - "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17"
        - "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17"
        - "Encounter, Performed: Psych Visit - Diagnostic Evaluation"

        - "Encounter, Performed: Psych Visit - Psychotherapy"
        - <= 30 day(s) ends after end of $InitialADHDMedication
- **$EncounterAfterInitialMedication =**
    - Union of:
        - "Encounter, Performed: Office Visit" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Hospital Observation Care - Initial" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Preventive Care Services - Group Counseling" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Behavioral Health Follow-up Visit" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Preventive Care Services-Individual Counseling" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Psychotherapy and Pharmacologic Management" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Face-to-Face Interaction" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Discharge Services- Observation Care" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Outpatient Consultation" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Home Healthcare Services" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Psych Visit - Diagnostic Evaluation" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
        - "Encounter, Performed: Psych Visit - Psychotherapy" satisfies all:
            - >= 31 day(s) ends after end of $InitialADHDMedication
            - <= 300 day(s) ends after end of $InitialADHDMedication
- **$InitialADHDMedication =**
    - First: Union of:
        - "Medication, Dispensed: ADHD Medications" <= 60 day(s) starts after start of "Measurement Period"
        - "Medication, Dispensed: ADHD Medications" <= 90 day(s) starts before or concurrent with start of "Measurement Period"

Rationale:

Attention-deficit hyperactivity disorder (ADHD) is one of the most prevalent behavioral health diseases in children. A National Survey of Children's Health study found that, in 2007, about 9.5% of children 4 to 17 years of age, or about 5.4 million, had a history of ADHD (CDC 2010). Of those 5.4 million children with a history of ADHD, 78% had a current diagnosis of ADHD at the time of the survey (CDC 2010) and 66.3% of those children were taking medication for the disorder (CDC 2010). A similar survey conducted in 2013 found that about 10% of American children age 3-17 have been diagnosed with ADHD (Bloom et al., 2013). ADHD also incurs substantial financial costs due to medical care and work loss costs for patients and families. The annual average direct cost per ADHD patient is $1,574 dollars compared to $541 dollars among similar individuals without ADHD (Swensen et al. 2003). Additionally, children with ADHD add a higher cost to the education system - on average $5,000 each year for each student with ADHD (Robb et al., 2011).

There are many symptoms associated with ADHD. Children with ADHD may experience significant functional problems, such as school difficulties, academic underachievement, troublesome relationships with family members and peers and behavioral problems (American Academy of Pediatrics 2000). For instance, recent studies have found that parents whose children have a history of ADHD report significantly more peer problems and a higher rate of non-fatal injuries compared to parents whose children do not have a history of ADHD (Strine et al. 2006; Xiang et al. 2005). Additional studies suggest that there is an increased risk for drug use disorders in adolescents with untreated ADHD (National Institute on Drug Abuse, 2010). One of the national objectives of the Department of Health and Human Services Healthy People 2020 initiative is to increase the proportion of children with mental health problems who receive treatment.

Medication treatment has been found to be effective for managing ADHD, but treatment requires careful monitoring by physicians. Studies have shown that psychostimulants are highly effective for 75-90% of children with ADHD by reducing symptoms of hyperactivity, impulsivity and inattention; improving classroom performance and behavior; and promoting increased interaction with teachers, parents and peers (U.S. Department of Health and Human Services 1999). Some reported adverse effects of stimulant ADHD medications including appetite loss, abdominal pain, headaches, sleep disturbance, decreasing growth velocity, and less commonly, hallucinations and other psychotic symptoms (Wolraich et al. 2011). Therefore, it is important to assess the presence or absence of potential adverse effects before and after a stimulant drug is initiated (Smucker & Hedayat 2001). Monitoring adverse effects from ADHD medication allows physicians to suggest an optimal, alternative treatment. Studies have also shown that treating children with effective medication management can lead to substantially greater improvements in social skills and peer relations compared to children who are not effectively managed (Jensen et al. 2001). Finally, treatments for children with ADHD are frequently not sustained despite the fact that they are at greater risk of significant problems if they discontinue treatment (Wolraich et al. 2011). Effective management mitigates the risk of discontinuing treatment.

Clinical Recommendation Statement:

American Academy of Child and Adolescent Psychiatry (AACAP) Practice Parameter for the Assessment and Treatment of Children and Adolescents with ADHD

- Overall Guideline

The key to effective long-term management of the patient with ADHD is continuity of care with a clinician experienced in the treatment of ADHD. The frequency and duration of follow-up sessions should be individualized for each family and patient, depending on the severity of ADHD symptoms; the degree of comorbidity of other psychiatric illness; the response to treatment; and the degree of impairment in home, school, work, or peer-related activities. The clinician should establish an effective mechanism for receiving feedback from the family and other important informants in the patient's environment to be sure symptoms are well controlled and side effects are minimal. Although this parameter does not seek to set a formula for the method of follow-up, significant contact with the clinician should typically occur two to four times per year in cases of uncomplicated ADHD and up to weekly sessions at times of severe dysfunction or complications of treatment.

- Recommendation 6: A Well-Thought-Out and Comprehensive Treatment Plan Should Be Developed for the Patient With ADHD. The treatment plan should be reviewed regularly and modified if the patient's symptoms do not respond. Minimal Standard [MS]

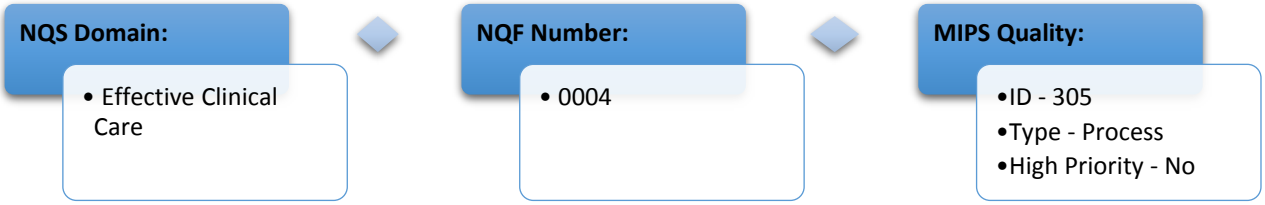
- Recommendation 9. During a Psychopharmacological Intervention for ADHD, the Patient Should Be Monitored for Treatment-Emergent Side Effects. Minimal Standard [MS]

- Recommendation 12. Patients Should Be Assessed Periodically to Determine Whether There Is Continued Need for Treatment or If Symptoms Have Remitted. Treatment of ADHD Should Continue as Long as Symptoms Remain Present and Cause Impairment. Minimal Standard [MS]

American Academy of Pediatrics Clinical Practice Guideline for the Diagnosis, Evaluation and Treatment of ADHD in Children and Adolescents

- Action Statement 4: The primary care clinician should recognize ADHD as a chronic condition and, therefore, consider children and adolescents with ADHD as children and youth with special health care needs. Management of children and youth with special health care needs should follow the principles of the chronic care model and the medical home. Grade B: Strong Recommendation

Measure: 137v5: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment



Measure Description:

Percentage of patients 13 years of age and older with a new episode of alcohol and other drug (AOD) dependence who received the following. Two rates are reported.

a. *Percentage of patients who initiated treatment within 14 days of the diagnosis.*
b. *Percentage of patients who initiated treatment and who had two or more additional services with an AOD diagnosis within 30 days of the initiation visit.*

Measure Definition:

The initiation visit is the first visit for alcohol or other drug dependence treatment within 14 days after a diagnosis of alcohol or other drug dependence.

Treatment includes inpatient AOD admissions, outpatient visits, intensive outpatient encounters or partial hospitalization.

Measure Guidance:

The new episode of alcohol and other drug dependence should be the first episode of the measurement period that is not preceded in the 60 days prior by another episode of alcohol or other drug dependence.

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Patients age 13 years of age and older who were diagnosed with a new episode of alcohol or drug dependency during a visit in the first 11 months of the measurement period	Equals Initial Population	Patients with a previous active diagnosis of alcohol or drug dependence in the 60 days prior to the first episode of alcohol or drug dependence	**Numerator 1:** Patients who initiated treatment within 14 days of the diagnosis **Numerator 2:** Patients who initiated treatment and who had two or more additional	None

			services with an AOD diagnosis within 30 days of the initiation visit	

Denominator Exceptions:

None.

Value Sets / Data Criteria:

- "Diagnosis: Alcohol and Drug Dependence" using "Alcohol and Drug Dependence Grouping Value Set (2.16.840.1.113883.3.464.1003.106.12.1001)"
- "Encounter, Performed: Alcohol and Drug Dependence Treatment" using "Alcohol and Drug Dependence Treatment Grouping Value Set (2.16.840.1.113883.3.464.1003.106.12.1005)"
- "Encounter, Performed: Detoxification Visit" using "Detoxification Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1059)"
- "Encounter, Performed: Discharge Services - Hospital Inpatient" using "Discharge Services - Hospital Inpatient Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1007)"
- "Encounter, Performed: Discharge Services - Hospital Inpatient Same Day Discharge" using "Discharge Services - Hospital Inpatient Same Day Discharge Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1006)"
- "Encounter, Performed: Emergency Department Visit" using "Emergency Department Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1010)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Hospital Inpatient Visit - Initial" using "Hospital Inpatient Visit - Initial Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1004)"
- "Encounter, Performed: Hospital Observation Care - Initial" using "Hospital Observation Care - Initial Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1002)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Psych Visit - Psychotherapy" using "Psych Visit - Psychotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1496)"

Credible Form Additions:

None.

Population Criteria:

- **------ Population Criteria 1 ------**

- **Initial Population =**
  - AND: Age>= 13 year(s) at: "Measurement Period"
  - AND: $FirstAlcoholDrugDependenceDx
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - OR: "Diagnosis: Alcohol and Drug Dependence" <= 60 day(s) starts before start of $FirstAlcoholDrugDependenceDx
- **Numerator =**
  - AND: $DrugDependenceTreatmentOrPsychVisit

- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratifications =**
  - **Stratification 1 =**
    - AND: Age>= 13 year(s) at: "Measurement Period"
    - AND: Age< 18 year(s) at: "Measurement Period"
  - **Stratification 2 =**
    - AND: Age>= 18 year(s) at: "Measurement Period"

- **----- Population Criteria 2 ------**

- **Initial Population =**
  - AND: Age>= 13 year(s) at: "Measurement Period"
  - AND: $FirstAlcoholDrugDependenceDx
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - OR: "Diagnosis: Alcohol and Drug Dependence" <= 60 day(s) starts before start of $FirstAlcoholDrugDependenceDx
- **Numerator =**
  - AND: Occurrence A of $DrugDependenceTreatmentOrPsychVisit
  - AND: Count>= 2 : Union of:
    - "Encounter, Performed: Alcohol and Drug Dependence Treatment"
    - "Encounter, Performed: Psych Visit - Psychotherapy"
    - <= 30 day(s) starts after start of Occurrence A of $DrugDependenceTreatmentOrPsychVisit
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratifications =**
  - **Stratification 1 =**
    - AND: Age>= 13 year(s) at: "Measurement Period"
    - AND: Age< 18 year(s) at: "Measurement Period"
  - **Stratification 2 =**
    - AND: Age>= 18 year(s) at: "Measurement Period"

Data Criteria (QDM Variables)

- **$DrugDependenceTreatmentOrPsychVisit =**
  - Union of:
    - "Encounter, Performed: Alcohol and Drug Dependence Treatment"
    - "Encounter, Performed: Psych Visit - Psychotherapy"
    - <= 14 day(s) starts after start of $FirstAlcoholDrugDependenceDx
- **$FirstAlcoholDrugDependenceDx =**
  - "Diagnosis: Alcohol and Drug Dependence" satisfies all:
    - First: <= 10 month(s) starts after start of "Measurement Period"
    - starts during (Union of:
      - "Encounter, Performed: Office Visit"
      - "Encounter, Performed: Emergency Department Visit"
      - "Encounter, Performed: Detoxification Visit"
      - "Encounter, Performed: Hospital Observation Care - Initial"
      - "Encounter, Performed: Hospital Inpatient Visit - Initial"
      - "Encounter, Performed: Discharge Services - Hospital Inpatient Same Day Discharge"

- "Encounter, Performed: Discharge Services - Hospital Inpatient"
- "Encounter, Performed: Face-to-Face Interaction"
- during "Measurement Period")

Rationale:

There are more deaths, illnesses and disabilities from substance abuse than from any other preventable health condition. Treatment of medical problems caused by substance use and abuse places a huge burden on the health care system (Schneider Institute 2001). According to a report from the 2001 National Household Survey on Drug Abuse (NHSDA), an estimated 16.6 million Americans aged 12 or older in 2001 were classified with dependence on or abuse of either alcohol or illicit drugs (7.3 percent of the total population) (Substance Abuse and Mental Health Services Administration 2008). Of these, 2.4 million were classified with dependence on or abuse of both alcohol and illicit drugs, 3.2 million were dependent on or abused illicit drugs but not alcohol, and 11.0 million were dependent on or abused alcohol but not illicit drugs (Substance Abuse and Mental Health Services Administration 2008).

Clinical Recommendation Statement:

American Psychiatric Association (2006)

- Because many substance use disorders are chronic, patients usually require long-term treatment, although the intensity and specific components of treatment may vary over time [I rating].
- It is important to intensify the monitoring for substance use during periods when the patient is at a high risk of relapsing, including during the early stages of treatment, times of transition to less intensive levels of care, and the first year after active treatment has ceased [I rating].
- Outpatient treatment of substance use disorders is appropriate for patients whose clinical condition or environmental circumstances do not require a more intensive level of care [I rating]. As in other treatment settings, a comprehensive approach is optimal, using, where indicated, a variety of psychotherapeutic and pharmacological interventions along with behavioral monitoring [I rating].

Michigan Quality Improvement Consortium (2013)

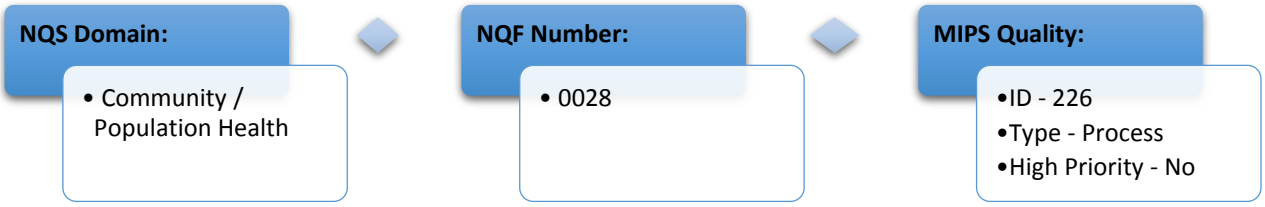
Patient Education and Brief Intervention by Primary Care Physician (PCP) or Trained Staff (eg, RN, MSW) [A rating]

- Assess patient's risk, understanding, and readiness to change.
- Discuss the relationship of substance use to presenting medical concerns or psychosocial problems.
- Negotiate goals and strategies for reducing consumption and other change.
- Involve family members as appropriate.

Referral

- Refer to a substance abuse health specialist, an addiction physician specialist, or a physician experienced in pharmacologic management of addiction [D rating]
- Initiate treatment within 14 days
- Frequent follow-up is helpful to support behavior change; preferably 2 visits within 30 days
- Also consider referrals to community-based services (eg, Alcoholics Anonymous [AA], Narcotics Anonymous [NA], etc.), or an Employee Assistance Program

Measure: 138v5: Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention



Measure Description:

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

Measure Definition:

- Tobacco Use - Includes any type of tobacco
- Tobacco Cessation Intervention - Includes brief counseling (3 minutes or less), and/or pharmacotherapy

Measure Guidance:

If a patient uses any type of tobacco (i.e., smokes or uses smokeless tobacco), the expectation is that they should receive tobacco cessation intervention: either counseling and/or pharmacotherapy.

If tobacco use status of a patient is unknown, the patient does not meet the screening component required to be counted in the numerator and should be considered a measure failure. Instances where tobacco use status of "unknown" is recorded include: 1) the patient was not screened; or 2) the patient was screened and the patient (or caregiver) was unable to provide a definitive answer. If the patient does not meet the screening component of the numerator but has an allowable medical exception, then the patient should be removed from the denominator of the measure and reported as a valid exception.

Exceptions only apply to the screening data element of the measure; once a patient has been screened, there are no allowable exceptions for not providing the intervention.

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
All patients aged 18 years and older seen for at least two visits or at least one preventive visit during the measurement period	Equals Initial Population	None	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	None

Denominator Exceptions:

Documentation of medical reason(s) for not screening for tobacco use (e.g., limited life expectancy, other medical reason)

Value Sets / Data Criteria:

- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit Grouping Value Set (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Health & Behavioral Assessment - Individual" using "Health & Behavioral Assessment - Individual Grouping Value Set (2.16.840.1.113883.3.526.3.1020)"
- "Encounter, Performed: Health and Behavioral Assessment - Initial" using "Health and Behavioral Assessment - Initial Grouping Value Set (2.16.840.1.113883.3.526.3.1245)"
- "Encounter, Performed: Health and Behavioral Assessment, Reassessment" using "Health and Behavioral Assessment, Reassessment Grouping Value Set (2.16.840.1.113883.3.526.3.1529)"
- "Encounter, Performed: Occupational Therapy Evaluation" using "Occupational Therapy Evaluation Grouping Value Set (2.16.840.1.113883.3.526.3.1011)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services Grouping Value Set (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up" using "Preventive Care Services - Established Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services - Group Counseling" using "Preventive Care Services - Group Counseling Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1027)"
- "Encounter, Performed: Preventive Care Services - Other" using "Preventive Care Services - Other Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1030)"
- "Encounter, Performed: Preventive Care Services-Individual Counseling" using "Preventive Care Services-Individual Counseling Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1026)"
- "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up" using "Preventive Care Services-Initial Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Encounter, Performed: Psych Visit - Diagnostic Evaluation" using "Psych Visit - Diagnostic Evaluation Grouping Value Set (2.16.840.1.113883.3.526.3.1492)"
- "Encounter, Performed: Psych Visit - Psychotherapy" using "Psych Visit - Psychotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1496)"

- "Encounter, Performed: Psychoanalysis" using "Psychoanalysis Grouping Value Set (2.16.840.1.113883.3.526.3.1141)"
- "Encounter, Performed: Speech and Hearing Evaluation" using "Speech and Hearing Evaluation Grouping Value Set (2.16.840.1.113883.3.526.3.1530)"
- "Intervention, Performed: Tobacco Use Cessation Counseling" using "Tobacco Use Cessation Counseling Grouping Value Set (2.16.840.1.113883.3.526.3.509)"
- "Medication, Active: Tobacco Use Cessation Pharmacotherapy" using "Tobacco Use Cessation Pharmacotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1190)"
- "Medication, Order: Tobacco Use Cessation Pharmacotherapy" using "Tobacco Use Cessation Pharmacotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1190)"
- "Patient Characteristic: Tobacco Non-User" using "Tobacco Non-User Grouping Value Set (2.16.840.1.113883.3.526.3.1189)"
- "Patient Characteristic: Tobacco User" using "Tobacco User Grouping Value Set (2.16.840.1.113883.3.526.3.1170)"
- "Risk Category Assessment: Tobacco Use Screening" using "Tobacco Use Screening Grouping Value Set (2.16.840.1.113883.3.526.3.1278)"
- "Risk Category Assessment not done: Medical Reason" using "Medical Reason Grouping Value Set (2.16.840.1.113883.3.526.3.1007)"
- "Risk Category Assessment not done: Limited Life Expectancy" using "Limited Life Expectancy Grouping Value Set (2.16.840.1.113883.3.526.3.1259)"

Credible Form Additions:

The following coded questions and answers are necessary to capture the documentation that the eligible professional (1) screened for tobacco use and (2) had performed cessation counseling intervention if identified as a tobacco user.

SNOMEDCT Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Question: Have you used tobacco in the last 30 days [SAMHSA] (LOINC 68535-4)

- Yes (SNOMEDCT 398166005)
- No (SNOMEDCT 262008008)
- Not asked - Medical Reason: Procedure not indicated (situation)
- Not asked - Limited Life Expectancy: Terminal illness (finding)

Question: Tobacco smoking status NHIS (LOINC 72166-2)

- Current every day smoker (SNOMEDCT 449868002)
- Heavy tobacco smoker (SNOMEDCT 428071000124103)
- Light tobacco smoker (SNOMEDCT 428061000124105)
- Current some day smoker (SNOMEDCT 428041000124106)
- Former smoker (SNOMEDCT 8517006)
- Never smoker (SNOMEDCT 266919005)
- Smoker, current status unknown (SNOMEDCT 77176002)
- Unknown if ever smoked (SNOMEDCT 266927001)

Question: Tobacco Use Cessation Counseling performed? (SNOMEDCT 225323000)

- Yes (SNOMEDCT 398166005)
- No (SNOMEDCT 262008008)

Population Criteria:

- **Initial Population =**
  - AND: Age >= 18 year(s) at: "Measurement Period"
  - AND:
    - OR: Count >= 2 of: Union of:
      - "Encounter, Performed: Psych Visit - Diagnostic Evaluation"
      - "Encounter, Performed: Health and Behavioral Assessment - Initial"
      - "Encounter, Performed: Health and Behavioral Assessment, Reassessment"
      - "Encounter, Performed: Health & Behavioral Assessment - Individual"
      - "Encounter, Performed: Occupational Therapy Evaluation"
      - "Encounter, Performed: Office Visit"
      - "Encounter, Performed: Psych Visit - Psychotherapy"
      - "Encounter, Performed: Psychoanalysis"
      - "Encounter, Performed: Ophthalmological Services"
      - during "Measurement Period"
    - OR: Count >= 1 of: Union of:
      - "Encounter, Performed: Preventive Care Services - Group Counseling"
      - "Encounter, Performed: Preventive Care Services - Other"
      - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
      - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
      - "Encounter, Performed: Preventive Care Services-Individual Counseling"
      - "Encounter, Performed: Face-to-Face Interaction"
      - "Encounter, Performed: Annual Wellness Visit"
      - "Encounter, Performed: Speech and Hearing Evaluation"
      - during "Measurement Period"
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND:
    - OR:
      - AND: "Risk Category Assessment: Tobacco Use Screening" <= 24 month(s) starts before end of "Measurement Period"
      - AND: "Occurrence A of Patient Characteristic: Tobacco Non-User" <= 24 month(s) starts before end of "Measurement Period"
      - AND NOT: "Patient Characteristic: Tobacco User" satisfies all
        - <= 24 month(s) starts before end of "Measurement Period"
        - starts after end of "Occurrence A of Patient Characteristic: Tobacco Non-User"
    - OR:
      - AND: "Risk Category Assessment: Tobacco Use Screening" <= 24 month(s) starts before end of "Measurement Period"
      - AND: "Occurrence A of Patient Characteristic: Tobacco User" <= 24 month(s) starts before end of "Measurement Period"
      - AND NOT: "Patient Characteristic: Tobacco Non-User" satisfies all
        - <= 24 month(s) starts before end of "Measurement Period"
        - starts after end of "Occurrence A of Patient Characteristic: Tobacco User"
      - AND: Union of:
        - "Intervention, Performed: Tobacco Use Cessation Counseling"
        - "Medication, Active: Tobacco Use Cessation Pharmacotherapy"
        - "Medication, Order: Tobacco Use Cessation Pharmacotherapy"
        - <= 24 month(s) starts before end of "Measurement Period"
- **Numerator Exclusions =**

    - None
- **Denominator Exceptions =**
    - OR: "Risk Category Assessment not done: Medical Reason" for "Tobacco Use Screening" <= 24 month(s) starts before end of "Measurement Period"
    - OR: "Risk Category Assessment not done: Limited Life Expectancy" for "Tobacco Use Screening" <= 24 month(s) starts before end of "Measurement Period"
- **Stratification =**
    - None

Rationale:

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

Clinical Recommendation Statement:

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)

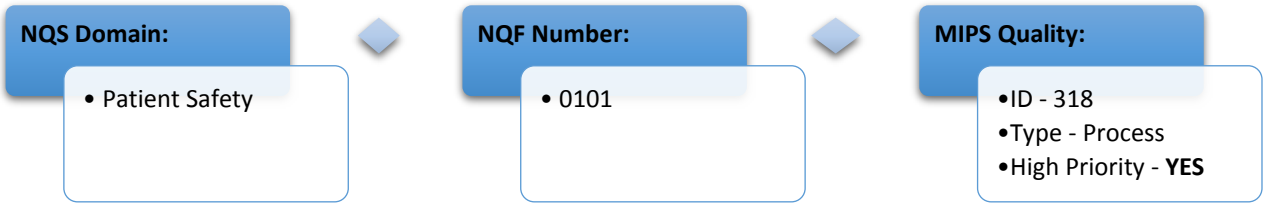
Minimal interventions lasting less than 3 minutes increase overall tobacco abstinence rates. Every tobacco user should be offered at least a minimal intervention, whether or not he or she is referred to an intensive intervention. (Strength of Evidence = A) (U.S. Department of Health and Human Services. 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)

Clinicians should encourage all patients attempting to quit to use effective medications for tobacco dependence treatment, except where contraindicated or for specific populations for which there is insufficient evidence of effectiveness (i.e., pregnant women, smokeless tobacco users, light smokers, and adolescents). (Strength of Evidence = A) (U.S. Department of Health and Human Services. Public Health Service, 2008)

The USPSTF recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products. (A Recommendation) (U.S. Preventive Services Task Force, 2009)

Measure: 139v5: Falls: Screening for Future Fall Risk



Measure Description:

Percentage of patients 65 years of age and older who were screened for future fall risk during the measurement period

Measure Definition:

None.

Measure Guidance:

None.

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Patients aged 65 years and older with a visit during the measurement period	Equals Initial Population	None	Patients who were screened for future fall risk at least once within the measurement period	None

Denominator Exceptions:

Documentation of medical reason(s) for not screening for fall risk (e.g., patient is not ambulatory)

Value Sets / Data Criteria:

- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit Grouping Value Set "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit Grouping Value Set (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: Audiology Visit" using "Audiology Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1066)"
- "Encounter, Performed: Care Services in Long-Term Residential Facility" using "Care Services in Long-Term Residential Facility Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1014)"

- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Nursing Facility Visit" using "Nursing Facility Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1012)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services Grouping Value Set (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up" using "Preventive Care Services - Established Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services-Individual Counseling" using "Preventive Care Services-Individual Counseling Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1026)"
- "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up" using "Preventive Care Services-Initial Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Risk Category Assessment: Falls Screening" using "Falls Screening Grouping Value Set (2.16.840.1.113883.3.464.1003.118.12.1028)"
- "Risk Category Assessment: Patient not ambulatory" using "Patient not ambulatory Grouping Value Set (2.16.840.1.113883.3.464.1003.118.12.1009)"
- "Risk Category Assessment not done: Medical Reason" using "Medical Reason Grouping Value Set (2.16.840.1.113883.3.526.3.1007)"

Credible Form Additions:

The following coded form questions are necessary to capture the documentation that the eligible professional performed a screening for future fall risk.

SNOMEDCT Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Question: Falls risk assessment (LOINC 73830-2)

- Performed (SNOMEDCT 398166005)
- Not performed due to History of - drug allergy (situation) (SNOMEDCT 161590003)
- Not performed due to Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Drug treatment not indicated (situation) (SNOMEDCT 183966005)
- Bed-ridden (finding) (SNOMEDCT 160685001)

Question: Fall risk assessment [OASIS-C] (LOINC 57254-5)

- Performed (SNOMEDCT 398166005)
- Not performed due to History of - drug allergy (situation) (SNOMEDCT 161590003)
- Not performed due to Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Drug treatment not indicated (situation) (SNOMEDCT 183966005)
- Bed-ridden (finding) (SNOMEDCT 160685001)

Population Criteria:

- **Initial Population =**
  - AND: Age>= 65 year(s) at: "Measurement Period"
  - AND: Union of:
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Preventive Care Services-Individual Counseling"
    - "Encounter, Performed: Nursing Facility Visit"
    - "Encounter, Performed: Care Services in Long-Term Residential Facility"
    - "Encounter, Performed: Home Healthcare Services"
    - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
    - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
    - "Encounter, Performed: Annual Wellness Visit"
    - "Encounter, Performed: Audiology Visit"
    - "Encounter, Performed: Ophthalmological Services"
    - during "Measurement Period"
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND: "Risk Category Assessment: Falls Screening" during "Measurement Period"
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - OR: Union of:
    - "Risk Category Assessment not done: Medical Reason" for "Falls Screening" during "Measurement Period"
    - "Risk Category Assessment: Patient not ambulatory" overlaps "Measurement Period"
- **Stratification =**
  - None

Rationale:

As the leading cause of both fatal and nonfatal injuries for older adults, falls are one of the most common and significant health issues facing people aged 65 years or older (Schneider, Shubert and Harmon 2010). Moreover, the rate of falls increases with age (Dykes et al. 2010). Older adults are five times more likely to be hospitalized for fall-related injuries than any other cause-related injury. It is estimated that one in every three adults over 65 will fall each year (Centers for Disease Control and Prevention 2015). In those over age 80, the rate of falls increases to fifty percent (Doherty et al. 2009). Falls are also associated with substantial cost and resource use, approaching $30,000 per fall hospitalization (Woolcott et al. 2011). Identifying at-risk patients is the most important part of management, as applying preventive measures in this vulnerable population can have a profound effect on public health (al-Aama 2011). Family physicians have a pivotal role in screening older patients for risk of falls, and applying preventive strategies for patients at risk (al-Aama 2011).

Clinical Recommendation Statement:

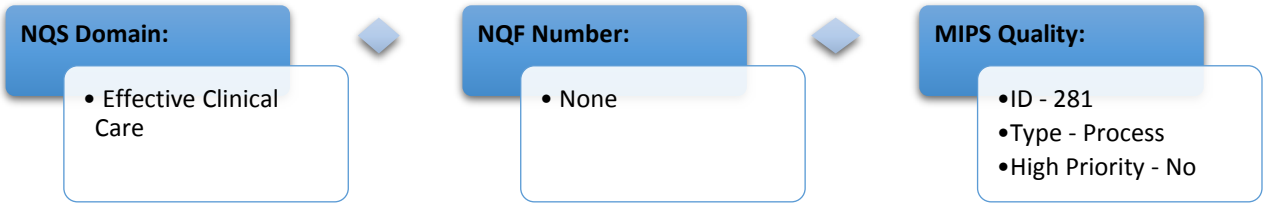
All older persons who are under the care of a heath professional (or their caregivers) should be asked at least once a year about falls. (AGS/BGS/AAOS)

Older persons who present for medical attention because of a fall, report recurrent falls in the past year, or demonstrate abnormalities of gait and/or balance should have a fall evaluation performed. This evaluation should be performed by a clinician with appropriate skills and experience, which may necessitate referral to a specialist (eg, geriatrician). (AGS/BGS/AAOS)

Older people in contact with health care professionals should be asked routinely whether they have fallen in the past year and asked about the frequency, context, and characteristics of the falls. (NICE) (Grade C)

Older people reporting a fall or considered at risk of falling should be observed for balance and gait deficits and considered for their ability to benefit from interventions to improve strength and balance. (NICE) (Grade C)

Measure: 149v5: Dementia: Cognitive Assessment



Measure Description:

Percentage of patients, regardless of age, with a diagnosis of dementia for whom an assessment of cognition is performed and the results reviewed at least once within a 12-month period

Measure Definition:

Cognition can be assessed by the clinician during the patient's clinical history.
Cognition can also be assessed by direct examination of the patient using one of a number of instruments, including several originally developed and validated for screening purposes. This can also include, where appropriate, administration to a knowledgeable informant. Examples include, but are not limited to:

- Blessed Orientation-Memory-Concentration Test (BOMC)
- Montreal Cognitive Assessment (MoCA)
- St. Louis University Mental Status Examination (SLUMS)
- Mini-Mental State Examination (MMSE) [Note: The MMSE has not been well validated for non-Alzheimer's dementias]
- Short Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE)
- Ascertain Dementia 8 (AD8) Questionnaire
- Minimum Data Set (MDS) Brief Interview of Mental Status (BIMS) [Note: Validated for use with nursing home patients only]
- Formal neuropsychological evaluation
- Mini-Cog

Measure Guidance:

Use of a standardized tool or instrument to assess cognition other than those listed will meet numerator performance. Standardized tools can be mapped to the concept "Intervention, Performed: Cognitive Assessment" included in the numerator logic below.

The requirement of "Count >=2 of Encounter, Performed" is to establish that the eligible professional has an existing relationship with the patient.

Improvement Notation:

A higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
All patients, regardless of age, with a diagnosis of dementia	Equals Initial Population	None	Patients for whom an assessment of cognition is performed and the results reviewed at least once within a 12-month period	None

Denominator Exceptions:

- Documentation of medical reason(s) for not assessing cognition (e.g., patient with very advanced stage dementia, other medical reason)
- Documentation of patient reason(s) for not assessing cognition

Value Sets / Data Criteria:

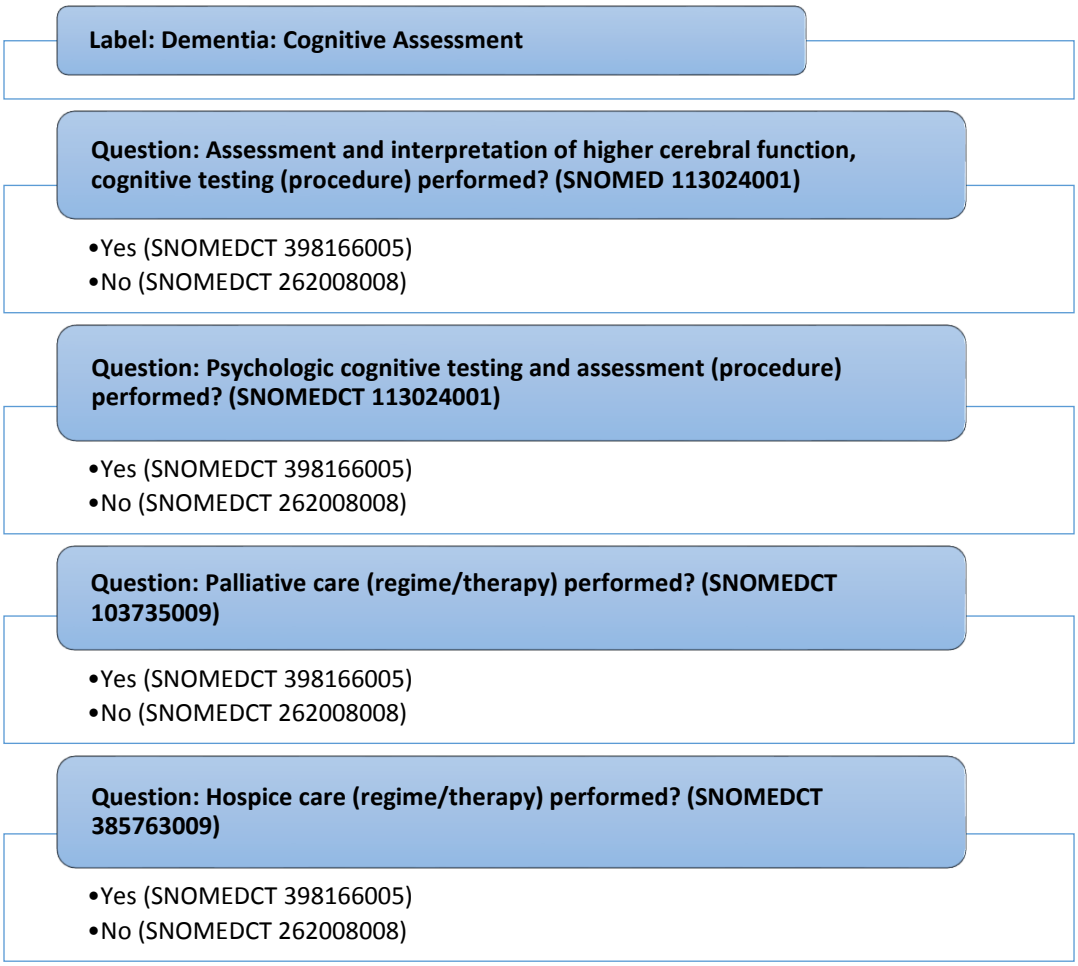
- "Diagnosis: Dementia & Mental Degenerations" using "Dementia & Mental Degenerations Grouping Value Set (2.16.840.1.113883.3.526.3.1005)"
- "Diagnosis: Severe Dementia" using "Severe Dementia Grouping Value Set (2.16.840.1.113883.3.526.3.1025)"
- "Encounter, Performed: Behavioral/Neuropsych Assessment" using "Behavioral/Neuropsych Assessment Grouping Value Set (2.16.840.1.113883.3.526.3.1023)"
- "Encounter, Performed: Care Services in Long-Term Residential Facility" using "Care Services in Long-Term Residential Facility Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1014)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Nursing Facility Visit" using "Nursing Facility Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1012)"
- "Encounter, Performed: Occupational Therapy Evaluation" using "Occupational Therapy Evaluation Grouping Value Set (2.16.840.1.113883.3.526.3.1011)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Outpatient Consultation" using "Outpatient Consultation Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1008)"
- "Encounter, Performed: Patient Provider Interaction" using "Patient Provider Interaction Grouping Value Set (2.16.840.1.113883.3.526.3.1012)"
- "Encounter, Performed: Psych Visit - Diagnostic Evaluation" using "Psych Visit - Diagnostic Evaluation Grouping Value Set (2.16.840.1.113883.3.526.3.1492)"
- "Encounter, Performed: Psych Visit - Psychotherapy" using "Psych Visit - Psychotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1496)"
- "Intervention, Performed: Cognitive Assessment" using "Cognitive Assessment Grouping Value Set (2.16.840.1.113883.3.526.3.1332)"
- "Intervention, Performed: Palliative Care" using "Palliative Care Grouping Value Set (2.16.840.1.113883.3.526.3.1024)"

- "Intervention, Performed not done: Medical Reason" using "Medical Reason Grouping Value Set (2.16.840.1.113883.3.526.3.1007)"
- "Intervention, Performed not done: Patient Reason" using "Patient Reason Grouping Value Set (2.16.840.1.113883.3.526.3.1008)"
- "Risk Category Assessment: Standardized Tools for Assessment of Cognition" using "Standardized Tools for Assessment of Cognition Grouping Value Set (2.16.840.1.113883.3.526.3.1006)"
- "Risk Category Assessment not done: Medical Reason" using "Medical Reason Grouping Value Set (2.16.840.1.113883.3.526.3.1007)"
- "Risk Category Assessment not done: Patient Reason" using "Patient Reason Grouping Value Set (2.16.840.1.113883.3.526.3.1008)"

Credible Form Additions:

The following coded form questions are necessary to capture the documentation that the eligible professional performed an assessment of cognition and the results reviewed at least once in a 12-month period.

SNOMEDCT and LOINC Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.



Label: Brief Interview for Mental Status (BIMS)

Text Box: BIMS Result (LOINC 58151-2)

Question: BIMS Not performed due to:

- Medical Reason: Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Medical Reason: Complication of medical care (disorder) (SNOMEDCT 35688006)
- Patient Reason: Patient non-compliant - refused intervention / support (situation) (SNOMEDCT 413311005)
- Patient Reason: Refused (qualifier value) (SNOMEDCT 443390004)

Population Criteria:

- **Initial Population =**
  - AND: Count>= 2 : Union of:
    - "Encounter, Performed: Psych Visit - Diagnostic Evaluation"
    - "Encounter, Performed: Nursing Facility Visit"
    - "Encounter, Performed: Care Services in Long-Term Residential Facility"
    - "Encounter, Performed: Home Healthcare Services"
    - "Encounter, Performed: Patient Provider Interaction"
    - "Encounter, Performed: Psych Visit - Psychotherapy"
    - "Encounter, Performed: Behavioral/Neuropsych Assessment"
    - "Encounter, Performed: Occupational Therapy Evaluation"
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Outpatient Consultation"
    - during "Measurement Period"
  - AND: "Diagnosis: Dementia & Mental Degenerations" overlaps Occurrence A of $DEMEncounters149
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND: Union of:
    - "Risk Category Assessment: Standardized Tools for Assessment of Cognition (result)"
    - "Intervention, Performed: Cognitive Assessment"
    - <= 12 month(s) starts before end of Occurrence A of $DEMEncounters149
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - OR: Union of:
    - "Diagnosis: Severe Dementia"
    - "Intervention, Performed: Palliative Care"
    - overlaps Occurrence A of $DEMEncounters149
  - OR: Union of:
    - "Risk Category Assessment not done: Medical Reason" for "Standardized Tools for Assessment of Cognition"
    - "Risk Category Assessment not done: Patient Reason" for "Standardized Tools for Assessment of Cognition"
    - "Intervention, Performed not done: Medical Reason" for "Cognitive Assessment"
    - "Intervention, Performed not done: Patient Reason" for "Cognitive Assessment"
    - starts during Occurrence A of $DEMEncounters149
- **Stratification =**

- None

Data Criteria (QDM Variables)

- **$DEMEncounters149 =**
  - Union of:
    - "Encounter, Performed: Psych Visit - Diagnostic Evaluation"
    - "Encounter, Performed: Nursing Facility Visit"
    - "Encounter, Performed: Care Services in Long-Term Residential Facility"
    - "Encounter, Performed: Home Healthcare Services"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Psych Visit - Psychotherapy"
    - "Encounter, Performed: Behavioral/Neuropsych Assessment"
    - "Encounter, Performed: Occupational Therapy Evaluation"
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Outpatient Consultation"
    - during "Measurement Period"

Rationale:

Dementia is often characterized by the gradual onset and continuing cognitive decline in one or more domains including memory, executive function, language, judgment, and spatial abilities. (APA, 2007) Cognitive deterioration represents a major source of morbidity and mortality and poses a significant burden on affected individuals and their caregivers. (NIH, 2010) Although cognitive deterioration follows a different course depending on the type of dementia, significant rates of decline have been reported. For example, one study found that the annual rate of decline for Alzheimer's disease patients was more than four times that of older adults with no cognitive impairment. (Wilson et al., 2010) Nevertheless, measurable cognitive abilities remain throughout the course of dementia. (APA, 2007) Initial and ongoing assessments of cognition are fundamental to the proper management of patients with dementia. These assessments serve as the basis for identifying treatment goals, developing a treatment plan, monitoring the effects of treatment, and modifying treatment as appropriate.

Clinical Recommendation Statement:

Ongoing assessment includes periodic monitoring of the development and evolution of cognitive and noncognitive psychiatric symptoms and their response to intervention (Category I). Both cognitive and noncognitive neuropsychiatric and behavioral symptoms of dementia tend to evolve over time, so regular monitoring allows detection of new symptoms and adaptation of treatment strategies to current needs... Cognitive symptoms that almost always require assessment include impairments in memory, executive function, language, judgment, and spatial abilities. It is often helpful to track cognitive status with a structured simple examination. (APA, 2007)

Conduct and document an assessment and monitor changes in cognitive status using a reliable and valid instrument. Cognitive status should be reassessed periodically to identify sudden changes, as well as to monitor the potential beneficial or harmful effects of environmental changes, specific medications, or other interventions. Proper assessment requires the use of a standardized, objective instrument that is relatively easy to use, reliable (with less variability between different assessors), and valid (results that would be similar to gold-standard evaluations). (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

Measure: 155v5: Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents

NQS Domain:
- Community / Population Health

NQF Number:
- 0024

MIPS Quality:
- ID - 239
- Type - Process
- High Priority - No

Measure Description:

Percentage of patients 3-17 years of age who had an outpatient visit with a Primary Care Physician (PCP) or Obstetrician/Gynecologist (OB/GYN) and who had evidence of the following during the measurement period. Three rates are reported.

- Percentage of patients with height, weight, and body mass index (BMI) percentile documentation
- Percentage of patients with counseling for nutrition
- Percentage of patients with counseling for physical activity

Measure Definition:

None

Measure Guidance:

The visit must be performed by a PCP or OB/GYN.

Because BMI norms for youth vary with age and sex, this measure evaluates whether BMI percentile is assessed rather than an absolute BMI value.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Patients 3-17 years of age with at least one outpatient visit with a primary care physician (PCP) or an obstetrician/gynecologist (OB/GYN) during the measurement period	Equals Initial Population	Patients who have a diagnosis of pregnancy during the measurement period	**Numerator 1:** Patients who had a height, weight and body mass index (BMI) percentile recorded during the measurement period **Numerator 2:** Patients who had counseling for nutrition during a visit that occurs during the	None

			measurement period **Numerator 3:** Patients who had counseling for physical activity during a visit that occurs during the measurement period	

Denominator Exceptions:

None.

Value Sets / Data Criteria:

- "Diagnosis, Active: Pregnancy" using "Pregnancy Grouping Value Set (2.16.840.1.113883.3.526.3.378)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17" using "Preventive Care - Established Office Visit, 0 to 17 Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1024)"
- "Encounter, Performed: Preventive Care Services - Group Counseling" using "Preventive Care Services - Group Counseling Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1027)"
- "Encounter, Performed: Preventive Care Services-Individual Counseling" using "Preventive Care Services-Individual Counseling Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1026)"
- "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17" using "Preventive Care- Initial Office Visit, 0 to 17 Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1022)"
- "Intervention, Performed: Counseling for Nutrition" using "Counseling for Nutrition Grouping Value Set (2.16.840.1.113883.3.464.1003.195.12.1003)"
- "Intervention, Performed: Counseling for Physical Activity" using "Counseling for Physical Activity Grouping Value Set (2.16.840.1.113883.3.464.1003.118.12.1035)"
- "Physical Exam, Performed: BMI percentile" using "BMI percentile Grouping Value Set (2.16.840.1.113883.3.464.1003.121.12.1012)"
- "Physical Exam, Performed: Height" using "Height Grouping Value Set (2.16.840.1.113883.3.464.1003.121.12.1014)"
- "Physical Exam, Performed: Weight" using "Weight Grouping Value Set (2.16.840.1.113883.3.464.1003.121.12.1015)"

$OutpatientVisits =
Union of:
- "Encounter, Performed: Face-to-Face Interaction"
- "Encounter, Performed: Office Visit"
- "Encounter, Performed: Preventive Care Services-Individual Counseling"
- "Encounter, Performed: Preventive Care- Initial Office Visit, 0 to 17"
- "Encounter, Performed: Preventive Care - Established Office Visit, 0 to 17"
- "Encounter, Performed: Preventive Care Services - Group Counseling"
- "Encounter, Performed: Home Healthcare Services"
- during "Measurement Period"

Credible Form Additions:

The following coded form questions are necessary to capture the documentation that the EP performed all three rates during the measurement period:

1. *Percentage of patients with height, weight, and body mass index (BMI) percentile documentation*
2. *Percentage of patients with counseling for nutrition*
3. *Percentage of patients with counseling for physical activity*

SNOMEDCT and LOINC Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Label: Complete Medical Profile Vital Signs (height/weight) [numerator 1]

Numeric Text Box: Body mass index (BMI) [Percentile] Per age and gender as calculated from: nccd.cdc.gov/dnpabmi/calculator.aspx [LOINC 59576-9]

Question: Counseling for Nutrition Performed [numerator 2]

- Diet education (procedure) (SNOMEDCT 11816003)
- Dietary needs education (procedure) (SNOMED 370847001)
- Weight control education (procedure) (SNOMED 410200000)
- *see note below for additional values*

Additional 'Counseling for Nutrition Performed' answer values can be configured utilizing choices from the CQM Value Set "Counseling for Nutrition" (OID 2.16.840.1.113883.3.464.1003.195.12.1003)

Question: Counseling for Physical Activity [numerator 3]

- Giving encouragement to exercise (procedure) (SNOMEDCT 304549008)
- Recommendation regarding activity (procedure) (SNOMED 223415003)
- Dietary education for weight gain (procedure) (SNOMED 429095004)
- *see note below for additional values*

Additional 'Counseling for Physical Activity' answer values can be configured utilizing choices from the CQM Value Set "Counseling for Physical Activity" (OID 2.16.840.1.113883.3.464.1003.118.12.1035)

Population Criteria:

- **------ Population Criteria 1 ------**
- **Initial Population =**
  - AND: Age >= 3 year(s) at: "Measurement Period"
  - AND: Age < 17 year(s) at: "Measurement Period"
  - AND: $OutpatientVisits
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**

    - OR: "Diagnosis, Active: Pregnancy" overlaps "Measurement Period"
- **Numerator =**
    - AND: "Physical Exam, Performed: BMI percentile (result)" during "Measurement Period"
    - AND: "Physical Exam, Performed: Height (result)" during "Measurement Period"
    - AND: "Physical Exam, Performed: Weight (result)" during "Measurement Period"
- **Numerator Exclusions =**
    - None
- **Denominator Exceptions =**
    - None
- **Stratifications =**
    - **Stratification 1 =**
        - AND: Age >= 3 year(s) at: "Measurement Period"
        - AND: Age < 11 year(s) at: "Measurement Period"
    - **Stratification 2 =**
        - AND: Age >= 11 year(s) at: "Measurement Period"
        - AND: Age < 17 year(s) at: "Measurement Period"
- **------ Population Criteria 2 ------**

- **Initial Population =**
    - AND: Age >= 3 year(s) at: "Measurement Period"
    - AND: Age < 17 year(s) at: "Measurement Period"
    - AND: $OutpatientVisits
- **Denominator =**
    - AND: Initial Population
- **Denominator Exclusions =**
    - OR: "Diagnosis, Active: Pregnancy" overlaps "Measurement Period"
- **Numerator =**
    - AND: "Intervention, Performed: Counseling for Nutrition" during $OutpatientVisits
- **Numerator Exclusions =**
    - None
- **Denominator Exceptions =**
    - None
- **Stratifications =**
    - **Stratification 1 =**
        - AND: Age >= 3 year(s) at: "Measurement Period"
        - AND: Age < 11 year(s) at: "Measurement Period"
    - **Stratification 2 =**
        - AND: Age >= 11 year(s) at: "Measurement Period"
        - AND: Age < 17 year(s) at: "Measurement Period"
- **------ Population Criteria 3 ------**

- **Initial Population =**
    - AND: Age >= 3 year(s) at: "Measurement Period"
    - AND: Age < 17 year(s) at: "Measurement Period"
    - AND: $OutpatientVisits
- **Denominator =**
    - AND: Initial Population
- **Denominator Exclusions =**
    - OR: "Diagnosis, Active: Pregnancy" overlaps "Measurement Period"
- **Numerator =**
    - AND: "Intervention, Performed: Counseling for Physical Activity" during $OutpatientVisits
- **Numerator Exclusions =**
    - None
- **Denominator Exceptions =**
    - None

- **Stratifications =**
    - **Stratification 1 =**
        - AND: Age >= 3 year(s) at: "Measurement Period"
        - AND: Age < 11 year(s) at: "Measurement Period"
    - **Stratification 2 =**
        - AND: Age >= 11 year(s) at: "Measurement Period"
        - AND: Age < 17 year(s) at: "Measurement Period"

Rationale:

One of the most important developments in pediatrics in the past two decades has been the emergence of a new chronic disease: obesity in childhood and adolescence. The rapidly increasing prevalence of obesity among children is one of the most challenging dilemmas currently facing pediatricians. National Health and Nutrition Examination Survey (NHANES) data from Cycle II (1976-1980) compared with data from Cycle III (1988-1994) documents an increase in the prevalence of obesity in all age, ethnic, and gender groups. NHANES data collected from 1999-2000 revealed a continued increase in the number of obese children. In that data collection, the prevalence of obesity (body mass index (BMI) > 95th percentile) was 10 percent among children 2-5 years of age and 15 percent among children 6-19 years of age. When children at risk for obesity (BMI of 85th-94th percentile) were included, the prevalence increased to 20 percent and 30 percent, respectively. Therefore, >1 of every 4 patients examined by pediatricians either is obese or is considered to be at high risk for developing this challenging health problem (O'Brien et al. 2004).

In addition to the growing prevalence of obesity in children and adolescents, the number of overweight children at risk of becoming obese is also of great concern. Evidence suggests that overweight children and adolescents are more likely to become obese as adults. For example, one study found that approximately 80 percent of children who were overweight at age 10-15 years were obese adults at age 25 years (Whitaker et al. 1997). Another study found that 25 percent of obese adults were overweight as children. The latter study also found that if overweight begins before 8 years of age, obesity in adulthood is likely to be more severe (Freedman et al. 2001).

Clinical Recommendation Statement:

U.S. Preventive Services Task Force (2005) - Evidence is insufficient to recommend for or against routine screening for overweight in children and adolescents as a means to prevent adverse health outcomes (I rating).

American Academy of Pediatrics (2004) - BMI should be calculated from the height and weight, and the BMI percentile should be calculated.

American Medical Association (AMA), Centers for Disease Control and Prevention (CDC), Health Resources and Services Administration (HRSA) (2007) - At minimum, a yearly assessment of weight status in all children.

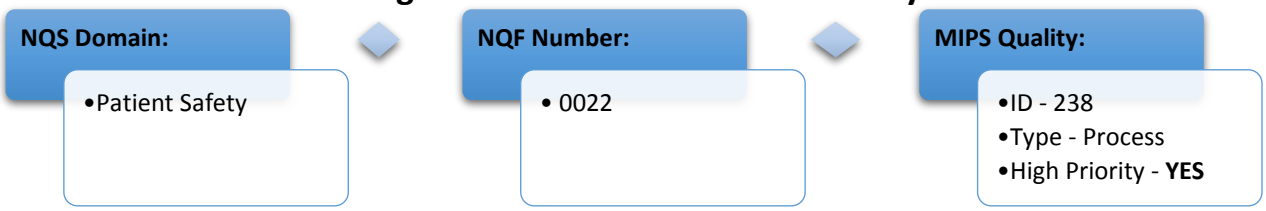
Include calculation of height, weight (measured appropriately), and body mass index (BMI) for age and plotting of those measures on standard growth charts.

The AAP and the American College of Clinical Endocrinology (ACCE) (Dorsey 2005) - Screen children for obesity using BMI and examine overweight children for obesity-related diseases.

CDC (Baker 2005) - Using the percentile BMI for age and sex as the most appropriate and easily available method to screen for childhood overweight or at risk for overweight.

Bright Futures (AAP) (Hagan 2008) - Calculate BMI at every visit.

Measure: 156v5: Use of High-Risk Medications in the Elderly



Measure Description:

Percentage of patients 66 years of age and older who were ordered high-risk medications. Two rates are reported.

- Percentage of patients who were ordered at least one high-risk medication.
- Percentage of patients who were ordered at least two different high-risk medications.

Measure Definition:

None.

Measure Guidance:

The intent of Numerator 1 of the measure is to assess if the patient has been prescribed at least one high-risk medication. The intent of Numerator 2 of the measure is to assess if the patient has been prescribed at least two different high-risk medications.

CUMULATIVE MEDICATION DURATION is an individual's total number of medication days over a specific period; the period counts multiple prescriptions with gaps in between, but does not count the gaps during which a medication was not dispensed.

To determine the cumulative medication duration, determine first the number of the Medication Days for each prescription in the period: the number of doses divided by the dose frequency per day. Then add the Medication Days for each prescription without counting any days between the prescriptions.

For example, there is an original prescription for 30 days with 2 refills for thirty days each. After a gap of 3 months, the medication was prescribed again for 60 days with 1 refill for 60 days. The cumulative medication duration is (30 x 3) + (60 x 2) = 210 days over the 10-month period.

Improvement Notation:

Lower score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Patients 66 years and older who had a visit during the measurement period	Equals Initial Population	None	**Numerator 1:** Patients with an order for at least one high-risk medication during the measurement period. **Numerator 2:** Patients with an order for at least two different high-risk medications during the measurement period.	None

Denominator Exceptions:

None.

Value Sets / Data Criteria:

- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit Grouping Value Set (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmologic Outpatient Visit" using "Ophthalmologic Outpatient Visit CPT Value Set (2.16.840.1.113883.3.464.1003.101.11.1206)"
- "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up" using "Preventive Care Services - Established Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up" using "Preventive Care Services-Initial Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Medication, Order: High Risk Medications for the Elderly" using "High Risk Medications for the Elderly Grouping Value Set (2.16.840.1.113883.3.464.1003.196.12.1253)"
- "Medication, Order: High-Risk Medications With Days Supply Criteria" using "High-Risk Medications With Days Supply Criteria Grouping Value Set (2.16.840.1.113883.3.464.1003.196.12.1254)"

Credible Form Additions:

None.

Population Criteria:

- **------ Population Criteria 1 ------**

- **Initial Population =**
  - AND: Age >= 66 year(s) at: "Measurement Period"
  - AND: Union of:
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
    - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
    - "Encounter, Performed: Annual Wellness Visit"
    - "Encounter, Performed: Home Healthcare Services"
    - during "Measurement Period"
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND:
    - OR: "Medication, Order: High Risk Medications for the Elderly" during "Measurement Period"
    - OR: Sum > 90 day(s) of: "Medication, Order: High-Risk Medications With Days Supply Criteria (cumulative medication duration)" during "Measurement Period"
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**
  - None
- **------ Population Criteria 2 ------**

- **Initial Population =**
  - AND: Age >= 66 year(s) at: "Measurement Period"
  - AND: Union of:
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
    - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
    - "Encounter, Performed: Annual Wellness Visit"
    - "Encounter, Performed: Home Healthcare Services"
    - during "Measurement Period"
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND: Count >= 2 of: Union of:
    - "Medication, Order: High Risk Medications for the Elderly"
    - "Medication, Order: High-Risk Medications With Days Supply Criteria (cumulative medication duration > 90 day(s))"
    - during "Measurement Period"

- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**
  - None

Rationale:

Seniors receiving inappropriate medications are more likely to report poorer health status at follow-up, compared to seniors who receive appropriate medications (Fu, Liu, and Christensen 2004). In 2005, rates of potentially inappropriate medication use in the elderly were as large or larger than in a 1996 national sample, highlighting the need for progress in this area (Simon et al. 2005). While some adverse drug events are not preventable, studies estimate that between 30 and 80 percent of adverse drug events in the elderly are preventable (MacKinnon and Hepler 2003).

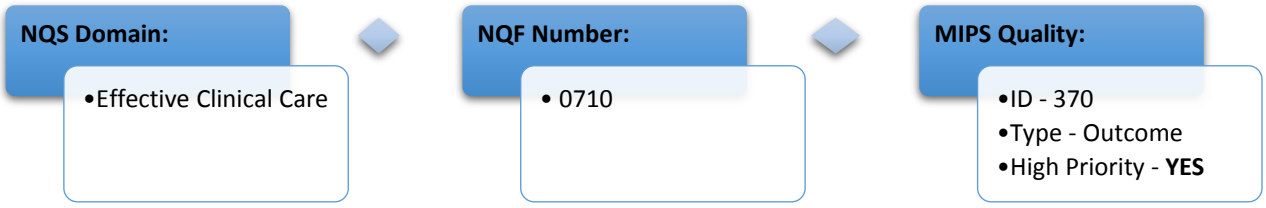
Reducing the number of inappropriate prescriptions can lead to improved patient safety and significant cost savings. Conservative estimates of extra costs due to potentially inappropriate medications in the elderly average $7.2 billion a year (Fu, Liu, and Christensen 2004). Medication use by older adults will likely increase further as the U.S. population ages, new drugs are developed, and new therapeutic and preventive uses for medications are discovered (Rothberg et al. 2008). By the year 2030, nearly one in five U.S. residents is expected to be aged 65 years or older; this age group is projected to more than double in number from 38.7 million in 2008 to more than 88.5 million in 2050. Likewise, the population aged 85 years or older is expected to increase almost four-fold, from 5.4 million to 19 million between 2008 and 2050. As the elderly population continues to grow, the number of older adults who present with multiple medical conditions for which several medications are prescribed continues to increase, resulting in polypharmacy (Gray and Gardner 2009).

Clinical Recommendation Statement:

The measure is based on recommendations from the American Geriatrics Society Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. The criteria were developed through key clinical expert consensus processes by Beers in 1997, Zahn in 2001 and an updated process by Fick in 2003, 2012 and 2015. The Beers Criteria identifies lists of drugs that are potentially inappropriate for all older adults and drugs that are potentially inappropriate in the elderly based on various high-risk factors such as dosage, days supply and underlying diseases or conditions. NCQA's Medication Management expert panel selected a subset of drugs that should be used with caution in the elderly for inclusion in the proposed measure based upon the recommendations in the Beers Criteria.

Certain medications (MacKinnon 2003) are associated with increased risk of harm from drug side-effects and drug toxicity and pose a concern for patient safety. There is clinical consensus that these drugs pose increased risks in the elderly (Kaufman 2005). Studies link prescription drug use by the elderly with adverse drug events that contribute to hospitalization, increased length of hospital stay, increased duration of illness, nursing home placement and falls and fractures that are further associated with physical, functional and social decline in the elderly (AHRQ 2009).

Measure: 159v5: Depression Remission at Twelve Months



Measure Description:

Adult patients age 18 and older with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate remission at twelve months defined as PHQ-9 score less than 5. This measure applies to both patients with newly diagnosed and existing depression whose current PHQ-9 score indicates a need for treatment

Measure Definition:

- Index visit may occur from January 1 through December 31 of the prior year.
- Remission is defined as a PHQ-9 score of less than five.
- Twelve months is defined as the point in time from the date that a patient meets the Initial Population inclusion criteria (diagnosis and PHQ-9 score greater than nine) extending out twelve months and then allowing a grace period of thirty days prior to and thirty days after this date. Any PHQ-9 score less than five obtained during this two-month period is deemed as remission at twelve months, values obtained prior to or after this period are not counted as numerator compliant (remission).

Measure Guidance:

None.

Improvement Notation:

Higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Patients age 18 and older with a diagnosis of major depression or dysthymia and an initial PHQ-9 score greater than nine during the index visit.	Equals Initial Population	1: Patients who died 2: Patients who received hospice or palliative care services 3: Patients who were permanent nursing home residents	Patients who achieved remission at twelve months as demonstrated by a twelve month (+/- 30 days grace period) PHQ-9 score of less than five	None

		4: Patients with a diagnosis of bipolar disorder 5: Patients with a diagnosis of personality disorder		

Value Sets / Data Criteria:

- "Diagnosis: Bipolar Disorder" using "Bipolar Disorder Grouping Value Set (2.16.840.1.113883.3.67.1.101.1.128)"
- "Diagnosis: Dysthymia" using "Dysthymia Grouping Value Set (2.16.840.1.113883.3.67.1.101.1.254)"
- "Diagnosis: Major Depression Including Remission" using "Major Depression Including Remission Grouping Value Set (2.16.840.113883.3.67.1.101.3.2444)"
- "Diagnosis: Personality Disorder" using "Personality Disorder Grouping Value Set (2.16.840.1.113883.3.67.1.101.1.246)"
- "Encounter, Performed: Care Services in Long-Term Residential Facility" using "Care Services in Long-Term Residential Facility Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1014)"
- "Encounter, Performed: Face to Face Interaction - No ED" using "Face to Face Interaction - No ED SNOMEDCT Value Set (2.16.840.1.113762.1.4.1080.1)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Psych Visit" using "Psych Visit Grouping Value Set (2.16.840.113883.3.67.1.101.3.2445)"
- "Intervention, Order: Palliative Care" using "Palliative Care Grouping Value Set (2.16.840.1.113883.3.526.3.1024)"
- "Risk Category Assessment: PHQ-9 Tool" using "PHQ-9 Tool Grouping Value Set (2.16.840.1.113883.3.67.1.101.11.723)"
- Attribute: "Principal diagnosis: Dysthymia" using "Dysthymia Grouping Value Set (2.16.840.1.113883.3.67.1.101.1.254)"
- Attribute: "Principal diagnosis: Major Depression Including Remission" using "Major Depression Including Remission Grouping Value Set (2.16.840.113883.3.67.1.101.3.2444)"

Credible Form Additions:

The following coded form questions are necessary to capture the documentation that the eligible professional performed and recorded the PHQ-9 tool and score during the time parameters of this measure.

SNOMEDCT and LOINC Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Numeric Text Box: Patient Health Questionnaire 9 item (PHQ-9) total score [Reported] (LOINC 44261-6)

Question: Pallative or Hospice Care

- Palliative care (regime/therapy) (SNOMEDCT 103735009)
- Hospice care (regime/therapy) (SNOMEDCT 385763009)

Population Criteria:

- **Initial Population =**
  - AND: Age>= 18 year(s) at: $DepressionIndex
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - OR: Union of:
    - "Intervention, Order: Palliative Care"
    - "Encounter, Performed: Care Services in Long-Term Residential Facility"
    - <= 1 year(s) starts before end of "Measurement Period"
  - OR: Union of:
    - "Expired : Patient Characteristic Expired"
    - "Diagnosis: Bipolar Disorder"
    - "Diagnosis: Personality Disorder"
    - starts before end of "Measurement Period"
- **Numerator =**
  - AND: "Risk Category Assessment: PHQ-9 Tool" satisfies all:
    - (result < 5)
    - < 13 month(s) starts after end of First: $DepressionIndex
    - > 10 month(s) starts after end of First: $DepressionIndex
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**
  - None

Data Criteria (QDM Variables)

- **$DepressionEncounter =**
  - "Encounter, Performed: Office Visit" satisfies all:
    - < 12 month(s) ends before start of "Measurement Period"
    - > 0 month(s) ends before start of "Measurement Period"
    - satisfies any:
      - overlaps "Diagnosis: Major Depression Including Remission"
      - overlaps "Diagnosis: Dysthymia"
- **$DepressionEncounterBH =**
  - "Encounter, Performed: Psych Visit" satisfies all:
    - < 12 month(s) ends before start of "Measurement Period"
    - > 0 month(s) ends before start of "Measurement Period"
    - satisfies any:
      - (principal diagnosis: Major Depression Including Remission)
      - (principal diagnosis: Dysthymia)
- **$DepressionF2FSnomed =**
  - "Encounter, Performed: Face to Face Interaction - No ED" satisfies all:
    - < 12 month(s) ends before start of "Measurement Period"
    - > 0 month(s) ends before start of "Measurement Period"
    - satisfies any:
      - overlaps "Diagnosis: Major Depression Including Remission"
      - overlaps "Diagnosis: Dysthymia"
- **$DepressionIndex =**
  - "Risk Category Assessment: PHQ-9 Tool (result > 9)" during Union of:
    - $DepressionEncounter
    - $DepressionEncounterBH
    - $DepressionF2FSnomed

Rationale:

The Centers for Disease Control and Prevention states that nationally 15.7% of people report being told by a health care professional that they had depression at some point in their lifetime. Persons with a current diagnosis of depression and a lifetime diagnosis of depression or anxiety were significantly more likely than persons without these conditions to have cardiovascular disease, diabetes, asthma and obesity and to be a current smoker, to be physically inactive and to drink heavily. According to National Institute of Mental Health (NIMH), 6.7 percent of the U.S. population ages 18 and older (14.8 million people) in any given year have a diagnosis of a major depressive disorder. Major depression is the leading cause of disability in the U.S. for ages 15 - 44. Additionally, dysthymia accounts for an additional 3.3 million Americans.

Clinical Recommendation Statement:

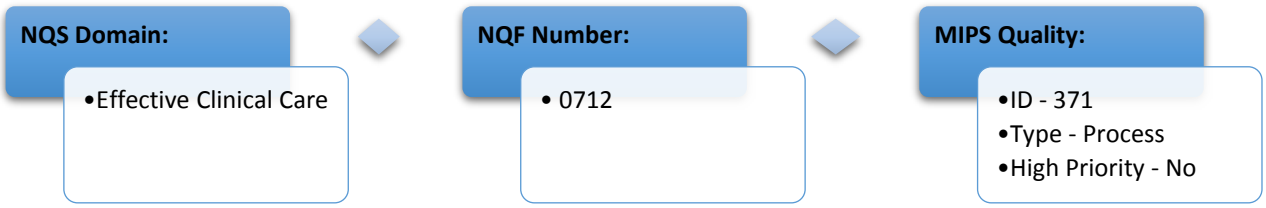
Improvement in the symptoms of depression and an ongoing assessment of the current treatment plan is crucial to the reduction of symptoms and psychosocial wellbeing of patients with major depression. Most people treated for initial depression need to be on medication at least six to twelve months after adequate response to symptoms, patients with recurrent depression need to be treated for three years or more and response with psychotherapy can take eight to twelve weeks of regular and frequent therapy to show improvement.

Remission is defined as a PHQ-9 score of less than five at twelve months. The Patient Health Questionnaire (PHQ-9) tool is a widely accepted, standardized tool [Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc. No permission required to reproduce, translate, display or distribute.] that is completed by the patient, ideally at each visit, and utilized by the provider to monitor treatment progress.

This tool was selected for measuring outcomes for this population because it is 1) validated with a sensitivity of .080 and a specificity of 0.92 with substantial heterogeneity I2 = 82%, 2) widely accepted and utilized in Minnesota, 3) available for clinical use, 4) translated into many languages and 5) easy for the patient to complete and the provider to score. Available at www.phqscreeners.com. This nine-question tool contains the following questions which are scored on a scale of 0 to 27 based on the scale of Not at All (0), Several Days (1), More Than Half the Days (2), or Nearly Every Day (3) for responses to the questions over the last 2 weeks.

- *Little interest or pleasure in doing things*
- *Feeling down, depressed, or hopeless*
- *Feeling tired or having little energy*
- *Poor appetite or overeating*
- *Feeling bad about yourself - or that you are a failure or have let yourself or your family down*
- *Trouble concentrating on things, such as reading the newspaper or watching television*
- *Moving or speaking so slowly that other people could have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual*
- *Thoughts that you would be better off dead or of hurting yourself in some way*

Measure: 160v5: Depression Utilization of the PHQ-9 Tool



Measure Description:

Patients age 18 and older with the diagnosis of major depression or dysthymia who have a Patient Health Questionnaire (PHQ-9) tool administered at least once during a 4-month period in which there was a qualifying visit.

Measure Definition:

None.

Measure Guidance:

None.

Improvement Notation:

Higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Patients age 18 and older with an office visit and the diagnosis of major depression or dysthymia during the four month period.	Equals Initial Population	1: Patients who died 2: Patients who received hospice or palliative care services 3: Patients who were permanent nursing home residents 4: Patients with a diagnosis of bipolar disorder 5: Patients with a diagnosis of personality disorder	Patients who have a PHQ-9 tool administered at least once during the four-month period.	None

Value Sets / Data Criteria:

- "Diagnosis: Bipolar Disorder" using "Bipolar Disorder Grouping Value Set (2.16.840.1.113883.3.67.1.101.1.128)"
- "Diagnosis: Dysthymia" using "Dysthymia Grouping Value Set (2.16.840.1.113883.3.67.1.101.1.254)"
- "Diagnosis: Major Depression Including Remission" using "Major Depression Including Remission Grouping Value Set (2.16.840.113883.3.67.1.101.3.2444)"
- "Diagnosis: Personality Disorder" using "Personality Disorder Grouping Value Set (2.16.840.1.113883.3.67.1.101.1.246)"
- "Encounter, Performed: Care Services in Long-Term Residential Facility" using "Care Services in Long-Term Residential Facility Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1014)"
- "Encounter, Performed: Face to Face Interaction - No ED" using "Face to Face Interaction - No ED SNOMEDCT Value Set (2.16.840.1.113762.1.4.1080.1)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Psych Visit" using "Psych Visit Grouping Value Set (2.16.840.113883.3.67.1.101.3.2445)"
- "Intervention, Order: Palliative Care" using "Palliative Care Grouping Value Set (2.16.840.1.113883.3.526.3.1024)"
- "Risk Category Assessment: PHQ-9 Tool" using "PHQ-9 Tool Grouping Value Set (2.16.840.1.113883.3.67.1.101.11.723)"
- Attribute: "Principal diagnosis: Dysthymia" using "Dysthymia Grouping Value Set (2.16.840.1.113883.3.67.1.101.1.254)"
- Attribute: "Principal diagnosis: Major Depression Including Remission" using "Major Depression Including Remission Grouping Value Set (2.16.840.113883.3.67.1.101.3.2444)"

Credible Form Additions:

The following coded form questions are necessary to capture the documentation that the eligible professional performed a PHQ-9 tool that meets the parameters and criteria for this measure and population.

SNOMEDCT and LOINC Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Numeric Text Box: Patient Health Questionnaire 9 item (PHQ-9) total score [Reported] (LOINC 44261-6)

Question: Pallative or Hospice Care

- Palliative care (regime/therapy) (SNOMEDCT 103735009)
- Hospice care (regime/therapy) (SNOMEDCT 385763009)

Population Criteria:

- **------ Population Criteria 1 ------**
- **Initial Population =**
    - AND: Age>= 18 year(s) at: "Measurement Period"
    - AND: Union of:
        - "Encounter, Performed: Office Visit" satisfies all:
            - < 4 month(s) ends before end of "Measurement Period"
            - satisfies any:
                - overlaps "Diagnosis: Major Depression Including Remission"
                - overlaps "Diagnosis: Dysthymia"
        - "Encounter, Performed: Psych Visit" satisfies all:
            - < 4 month(s) ends before end of "Measurement Period"

            - satisfies any:
                - (principal diagnosis: Major Depression Including Remission)
                - (principal diagnosis: Dysthymia)
        - "Encounter, Performed: Face to Face Interaction - No ED" satisfies all:
            - < 4 month(s) ends before end of "Measurement Period"
            - satisfies any:
                - overlaps "Diagnosis: Major Depression Including Remission"
                - overlaps "Diagnosis: Dysthymia"

- **Denominator =**
    - AND: Initial Population
- **Denominator Exclusions =**
    - OR: Union of:
        - "Intervention, Order: Palliative Care"
        - "Encounter, Performed: Care Services in Long-Term Residential Facility"
        - <= 1 year(s) starts before end of "Measurement Period"
    - OR: Union of:
        - "Expired : Patient Characteristic Expired"
        - "Diagnosis: Bipolar Disorder"
        - "Diagnosis: Personality Disorder"
        - starts before end of "Measurement Period"
- **Numerator =**
    - AND: "Risk Category Assessment: PHQ-9 Tool (result)" < 4 month(s) ends before end of "Measurement Period"
- **Numerator Exclusions =**
    - None
- **Denominator Exceptions =**
    - None
- **Stratification =**
    - None
- **------ Population Criteria 2 ------**
- **Initial Population =**
    - AND: Age>= 18 year(s) at: "Measurement Period"
    - AND: Union of:
        - "Encounter, Performed: Office Visit" satisfies all:
            - >= 4 month(s) ends after start of "Measurement Period"
            - < 8 month(s) ends after start of "Measurement Period"
            - satisfies any:
                - overlaps "Diagnosis: Major Depression Including Remission"
                - overlaps "Diagnosis: Dysthymia"
        - "Encounter, Performed: Psych Visit" satisfies all:
            - >= 4 month(s) ends after start of "Measurement Period"
            - < 8 month(s) ends after start of "Measurement Period"
            - satisfies any:
                - (principal diagnosis: Major Depression Including Remission)
                - (principal diagnosis: Dysthymia)
        - "Encounter, Performed: Face to Face Interaction - No ED" satisfies all:
            - >= 4 month(s) ends after start of "Measurement Period"
            - < 8 month(s) ends after start of "Measurement Period"
            - satisfies any:
                - overlaps "Diagnosis: Major Depression Including Remission"
                - overlaps "Diagnosis: Dysthymia"
- **Denominator =**
    - AND: Initial Population
- **Denominator Exclusions =**
    - OR: Union of:
        - "Intervention, Order: Palliative Care"

            - "Encounter, Performed: Care Services in Long-Term Residential Facility"
            - <= 1 year(s) starts before end of "Measurement Period"
        - OR: Union of:
            - "Expired : Patient Characteristic Expired"
            - "Diagnosis: Bipolar Disorder"
            - "Diagnosis: Personality Disorder"
            - starts before end of "Measurement Period"
- **Numerator =**
    - AND: "Risk Category Assessment: PHQ-9 Tool" satisfies all:
        - (result)
        - >= 4 month(s) ends after start of "Measurement Period"
        - < 8 month(s) ends after start of "Measurement Period"
- **Numerator Exclusions =**
    - None
- **Denominator Exceptions =**
    - None
- **Stratification =**
    - None
- **------ Population Criteria 3 ------**
- **Initial Population =**
    - AND: Age>= 18 year(s) at: "Measurement Period"
    - AND: Union of:
        - "Encounter, Performed: Office Visit" satisfies all:
            - < 4 month(s) ends after start of "Measurement Period"
            - satisfies any:
                - overlaps "Diagnosis: Major Depression Including Remission"
                - overlaps "Diagnosis: Dysthymia"
        - "Encounter, Performed: Psych Visit" satisfies all:
            - < 4 month(s) ends after start of "Measurement Period"
            - satisfies any:
                - (principal diagnosis: Major Depression Including Remission)
                - (principal diagnosis: Dysthymia)
        - "Encounter, Performed: Face to Face Interaction - No ED" satisfies all:
            - < 4 month(s) ends after start of "Measurement Period"
            - satisfies any:
                - overlaps "Diagnosis: Major Depression Including Remission"
                - overlaps "Diagnosis: Dysthymia"
- **Denominator =**
    - AND: Initial Population
- **Denominator Exclusions =**
    - OR: Union of:
        - "Intervention, Order: Palliative Care"
        - "Encounter, Performed: Care Services in Long-Term Residential Facility"
        - <= 1 year(s) starts before end of "Measurement Period"
    - OR: Union of:
        - "Expired : Patient Characteristic Expired"
        - "Diagnosis: Bipolar Disorder"
        - "Diagnosis: Personality Disorder"
        - starts before end of "Measurement Period"
- **Numerator =**
    - AND: "Risk Category Assessment: PHQ-9 Tool (result)" < 4 month(s) ends after start of "Measurement Period"
- **Numerator Exclusions =**
    - None
- **Denominator Exceptions =**
    - None

- **Stratification =**
  - None

Rationale:

The Centers for Disease Control and Prevention states that nationally 15.7% of people report being told by a health care professional that they had depression at some point in their lifetime. Persons with a current diagnosis of depression and a lifetime diagnosis of depression or anxiety were significantly more likely than persons without these conditions to have cardiovascular disease, diabetes, asthma and obesity and to be a current smoker, to be physically inactive and to drink heavily. According to National Institute of Mental Health (NIMH), 6.7 percent of the U.S. population ages 18 and older (14.8 million people) in any given year have a diagnosis of a major depressive disorder. Major depression is the leading cause of disability in the U.S. for ages 15 - 44. Additionally, dysthymia accounts for an additional 3.3 million Americans.

Clinical Recommendation Statement:

This process measure for using the PHQ-9 tool is directly related to the desired outcomes of demonstrating improvement in symptoms of depression (remission). Improvement in the symptoms of depression and an ongoing assessment of the current treatment plan is crucial to the reduction of symptoms and psychosocial well-being of patients with major depression.

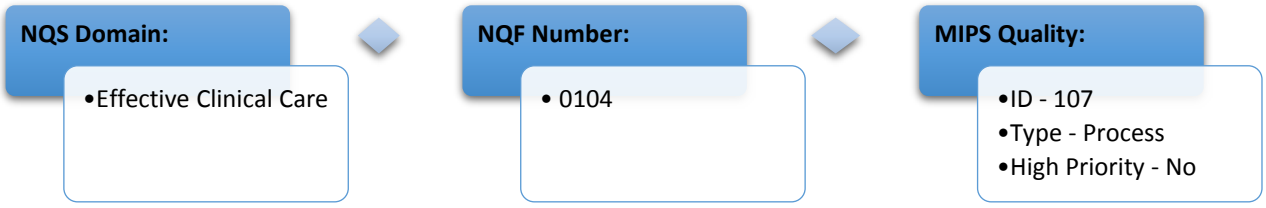
Most people treated for initial depression need to be on medication at least six to twelve months after adequate response to symptoms, patients with recurrent depression need to be treated for three years or more and response with psychotherapy can take eight to twelve weeks of regular and frequent therapy to show improvement. Remission is defined as a PHQ-9 score of less than five at twelve months.

The Patient Health Questionnaire (PHQ-9) tool is a widely accepted, standardized tool [Developed by Drs. Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke and colleagues, with an educational grant from Pfizer Inc. No permission required to reproduce, translate, display or distribute.] that is completed by the patient, ideally at each visit, and utilized by the provider to monitor treatment progress. This tool was selected for measuring outcomes for this population because it is 1) validated with a sensitivity of .080 and a specificity of 0.92 with substantial heterogeneity I2 = 82%, 2) widely accepted and utilized in Minnesota, 3) available for clinical use, 4) translated into many languages and 5) easy for the patient to complete and the provider to score. Available at www.phqscreeners.com.

This nine-question tool contains the following questions which are scored on a scale of 0 to 27 based on the scale of Not at All (0), Several Days (1), More Than Half the Days (2), or Nearly Every Day (3) for responses to the questions over the last 2 weeks.

- *Little interest or pleasure in doing things*
- *Feeling down, depressed, or hopeless*
- *Feeling tired or having little energy*
- *Poor appetite or overeating*
- *Feeling bad about yourself - or that you are a failure or have let yourself or your family down*
- *Trouble concentrating on things, such as reading the newspaper or watching television*
- *Moving or speaking so slowly that other people could have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual*
- *Thoughts that you would be better off dead or of hurting yourself in some way*

Measure: 161v5: Adult Major Depressive Disorder (MDD): Suicide Risk Assessment



Measure Description:

Percentage of patients aged 18 years and older with a diagnosis of major depressive disorder (MDD) with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified

Measure Definition:

Suicide risk assessment - Must include questions about the following:

1) Suicidal ideation
2) Patient's intent of initiating a suicide attempt

AND, if either is present,

3) Patient plans for a suicide attempt
4) Whether the patient has means for completing suicide

Measure Guidance:

- It is expected that a suicide risk assessment will be completed at the visit during which a new diagnosis is made or at the visit during which a recurrent episode is first identified (i.e., at the initial evaluation). This measure is an episode-of-care measure and should be reported for each instance of a new or recurrent episode of MDD; every new or recurrent episode will count separately in the Initial Population.

- Use of a standardized tool or instrument to assess suicide risk will meet numerator performance. Standardized tools can be mapped to the concept "Intervention, Performed: Suicide Risk Assessment" included in the numerator logic below.

- The measure description outlined in the header for this measure states, 'patients aged 18 years and older' while the logic statement states, '>= 17 year(s) at: "Measurement Period"'. The logic statement, as written, captures patients who turn 18 years old during the measurement period so that these patients are included in the measure. To ensure all patients with major depressive disorder (MDD) are assessed for suicide risk, there are two clinical quality measures addressing suicide risk assessment; CMS 177 covers children and adolescents aged 6 through 17, and CMS 161 covers the adult population aged 18 years and older.

Improvement Notation:

Higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
All patients aged 18 years and older with a diagnosis of major depressive disorder (MDD)	Equals Initial Population	None	Patients with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified	None

Value Sets / Data Criteria:

- "Diagnosis: Major Depressive Disorder-Active" using "Major Depressive Disorder-Active Grouping Value Set (2.16.840.1.113883.3.526.3.1491)"
- "Encounter, Performed: Emergency Department Visit" using "Emergency Department Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1010)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Outpatient Consultation" using "Outpatient Consultation Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1008)"
- "Encounter, Performed: Psych Visit - Diagnostic Evaluation" using "Psych Visit - Diagnostic Evaluation Grouping Value Set (2.16.840.1.113883.3.526.3.1492)"
- "Encounter, Performed: Psych Visit - Psychotherapy" using "Psych Visit - Psychotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1496)"
- "Encounter, Performed: Psychoanalysis" using "Psychoanalysis Grouping Value Set (2.16.840.1.113883.3.526.3.1141)"
- "Intervention, Performed: Suicide Risk Assessment" using "Suicide Risk Assessment Grouping Value Set (2.16.840.1.113883.3.526.3.1484)"

Credible Form Additions:

The following coded form questions are necessary to capture the documentation that the eligible professional performed a suicide risk assessment as defined in the measure description, guidance and clinical recommendation statement.

SNOMEDCT and LOINC Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Question: Suicide risk assessment (procedure) (SNOMED 225337009)

- Performed (SNOMEDCT 398166005)
- Not performed due to Medical Reason: Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Medical Reason: Complication of medical care (disorder) (SNOMEDCT 35688006)
- Not performed due to Patient Reason: Patient non-compliant - refused intervention / support (situation) (SNOMEDCT 413311005)
- Not performed due to Patient Reason: Refused (qualifier value) (SNOMEDCT 443390004)

Population Criteria:

- **Initial Population =**
  - AND: Age >= 17 year(s) at: "Measurement Period"
  - AND: "Diagnosis, Active: Major Depressive Disorder-Active" starts during Occurrence A of $MDDEncounters161
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND: "Intervention, Performed: Suicide Risk Assessment" during Occurrence A of $MDDEncounters161
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**
  - None

Data Criteria (QDM Variables)

- **$MDDEncounters161 =**
  - Union of:
    - "Encounter, Performed: Psych Visit - Diagnostic Evaluation"
    - "Encounter, Performed: Psych Visit - Psychotherapy"
    - "Encounter, Performed: Emergency Department Visit"
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Outpatient Consultation"
    - "Encounter, Performed: Psychoanalysis"
    - "Encounter, Performed: Face-to-Face Interaction"
    - during "Measurement Period"

Rationale:

Research has shown that more than 90% of people who kill themselves have depression or another diagnosable mental or substance abuse disorder. Depression is the cause of over two-thirds of the reported suicides in the U.S. each year. The intent of this measure is for a clinician to assess suicide risk at initial intake or at the visit in which depression was diagnosed. As the guidelines state, it is important to assess for additional factors which may increase or decrease suicide risk, such as presence of additional symptoms (e.g., psychosis, severe anxiety, hopelessness, severe chronic pain); presence of substance abuse, history and seriousness of previous attempts, particularly, recent suicidal behavior, current stressors and potential protective factors (e.g., positive reasons for living, strong social support), family history of suicide or mental illness or recent exposure to suicide, impulsivity and potential for risk to others, including history of violence or violent or homicidal ideas, plans, or intentions, and putting one's affairs in order (e.g., giving away possessions, writing a will). In addition, although the measure focuses on the initial visit, it is critical that suicide risk be monitored especially for the 90 days following the initial visit and throughout MDD treatment.

Clinical Recommendation Statement:

A careful and ongoing evaluation of suicide risk is necessary for all patients with major depressive disorder [I]. (APA, 2010)

Such an assessment includes specific inquiry about suicidal thoughts, intent, plans, means, and behaviors; identification of specific psychiatric symptoms (e.g., psychosis, severe anxiety, substance use) or general medical conditions that may increase the likelihood of acting on suicidal ideas; assessment of past and, particularly, recent suicidal behavior; delineation of current stressors and potential protective factors (e.g., positive reasons for living, strong social support); and identification of any family history of suicide or mental illness [I]. (APA, 2010)

As part of the assessment process, impulsivity and potential for risk to others should also be evaluated, including any history of violence or violent or homicidal ideas, plans, or intentions [I]. (APA, 2010)

The patient's risk of harm to him- or herself and to others should also be monitored as treatment proceeds [I]. (APA, 2010)

Guidelines for Selecting a Treatment Setting for Patients at Risk for Suicide or Suicidal Behaviors (from APA's Practice Guideline for Assessment and Treatment of Patients With Suicidal Behaviors-2010, Downloaded from http://psychiatryonline.org/ on 6/25/12):
Admission generally indicated
After a suicide attempt or aborted suicide attempt if:

- *Patient is psychotic*
- *Attempt was violent, near-lethal, or premeditated*
- *Precautions were taken to avoid rescue or discovery*
- *Persistent plan and/or intent is present*
- *Distress is increased or patient regrets surviving*
- *Patient is male, older than age 45 years, especially with new onset of psychiatric illness or suicidal thinking*
- *Patient has limited family and/or social support, including lack of stable living situation*
- *Current impulsive behavior, severe agitation, poor judgment, or refusal of help is evident*
- *Patient has change in mental status with a metabolic, toxic, infectious, or other etiology requiring further workup in a structured setting*

In the presence of suicidal ideation with:

- *Specific plan with high lethality*
- *High suicidal intent*

Admission may be necessary
After a suicide attempt or aborted suicide attempt, except in circumstances for which admission is generally indicated

In the presence of suicidal ideation with:

- *Psychosis*
- *Major psychiatric disorder*
- *Past attempts, particularly if medically serious*
- *Possibly contributing medical condition (e.g., acute neurological disorder, cancer, infection)*
- *Lack of response to or inability to cooperate with partial hospital or outpatient treatment*
- *Need for supervised setting for medication trial or ECT*
- *Need for skilled observation, clinical tests, or diagnostic assessments that require a structured setting*
- *Limited family and/or social support, including lack of stable living situation*
- *Lack of an ongoing clinician-patient relationship or lack of access to timely outpatient follow-up*
- *[Evidence of putting one's affairs in order (e.g., giving away possessions, writing a will)]*

In the absence of suicide attempts or reported suicidal ideation/plan/intent but evidence from the psychiatric evaluation and/or history from others suggests a high level of suicide risk and a recent acute increase in risk

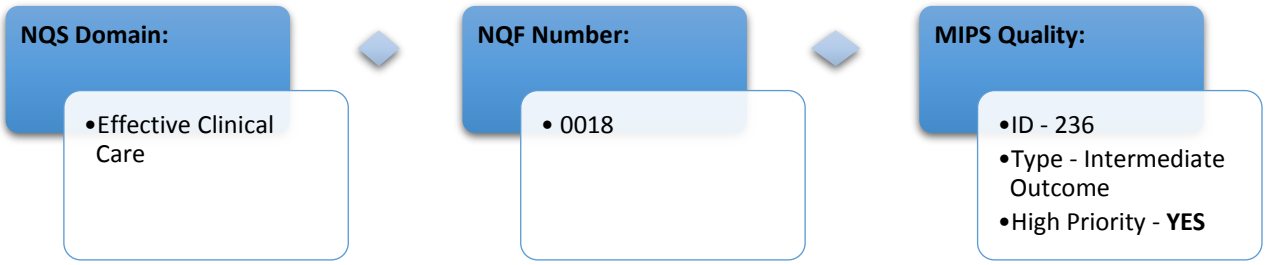
Release from emergency department with follow-up recommendations may be possible
After a suicide attempt or in the presence of suicidal ideation/plan when:

- *Suicidality is a reaction to precipitating events (e.g., exam failure, relationship difficulties), particularly if the patient's view of situation has changed since coming to emergency department*
- *Plan/method and intent have low lethality*
- *Patient has stable and supportive living situation*

- *Patient is able to cooperate with recommendations for follow-up, with treater contacted, if possible, if patient is currently in treatment*

Outpatient treatment may be more beneficial than hospitalization
Patient has chronic suicidal ideation and/or self-injury without prior medically serious attempts, if a safe and supportive living situation is available and outpatient psychiatric care is ongoing.

Measure: 165v5: Controlling High Blood Pressure



Measure Description:

Percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (<140/90mmHg) during the measurement period.

Measure Definition:

None.

Measure Guidance:

- In reference to the numerator element, only blood pressure readings performed by a clinician in the provider office are acceptable for numerator compliance with this measure. Blood pressure readings from the patient's home (including readings directly from monitoring devices) are not acceptable.
- If no blood pressure is recorded during the measurement period, the patient's blood pressure is assumed *not controlled.*
- If there are *multiple* blood pressure readings on the same day, use the lowest systolic and the lowest diastolic reading as the most recent blood pressure reading.

Improvement Notation:

Higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Patients 18-85 years of age who had a diagnosis of essential hypertension within the first six months of the measurement period or any time prior to the measurement period	Equals Initial Population	Patients with evidence of end stage renal disease (ESRD), dialysis or renal transplant before or during the measurement period. Also exclude patients with a diagnosis of pregnancy during the measurement period.	Patients whose blood pressure at the most recent visit is adequately controlled (systolic blood pressure < 140 mmHg and diastolic blood pressure < 90 mmHg) during the measurement period.	None

Value Sets / Data Criteria:

- "Diagnosis: Chronic Kidney Disease, Stage 5" using "Chronic Kidney Disease, Stage 5 Grouping Value Set (2.16.840.1.113883.3.526.3.1002)"
- "Diagnosis: End Stage Renal Disease" using "End Stage Renal Disease Grouping Value Set (2.16.840.1.113883.3.526.3.353)"
- "Diagnosis: Essential Hypertension" using "Essential Hypertension Grouping Value Set (2.16.840.1.113883.3.464.1003.104.12.1011)"
- "Diagnosis: Pregnancy" using "Pregnancy Grouping Value Set (2.16.840.1.113883.3.526.3.378)"
- "Encounter, Performed: Adult Outpatient Visit" using "Adult Outpatient Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1065)"
- "Encounter, Performed: Annual Wellness Visit" using "Annual Wellness Visit Grouping Value Set (2.16.840.1.113883.3.526.3.1240)"
- "Encounter, Performed: ESRD Monthly Outpatient Services" using "ESRD Monthly Outpatient Services Grouping Value Set (2.16.840.1.113883.3.464.1003.109.12.1014)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Home Healthcare Services" using "Home Healthcare Services Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1016)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up" using "Preventive Care Services - Established Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1025)"
- "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up" using "Preventive Care Services-Initial Office Visit, 18 and Up Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1023)"
- "Intervention, Performed: Dialysis Education" using "Dialysis Education Grouping Value Set (2.16.840.1.113883.3.464.1003.109.12.1016)"
- "Intervention, Performed: Other Services Related to Dialysis" using "Other Services Related to Dialysis Grouping Value Set (2.16.840.1.113883.3.464.1003.109.12.1015)"
- "Physical Exam, Performed: Diastolic Blood Pressure" using "Diastolic Blood Pressure Grouping Value Set (2.16.840.1.113883.3.526.3.1033)"
- "Physical Exam, Performed: Systolic Blood Pressure" using "Systolic Blood Pressure Grouping Value Set (2.16.840.1.113883.3.526.3.1032)"
- "Procedure, Performed: Dialysis Services" using "Dialysis Services Grouping Value Set (2.16.840.1.113883.3.464.1003.109.12.1013)"
- "Procedure, Performed: Kidney Transplant" using "Kidney Transplant Grouping Value Set (2.16.840.1.113883.3.464.1003.109.12.1012)"
- "Procedure, Performed: Vascular Access for Dialysis" using "Vascular Access for Dialysis Grouping Value Set (2.16.840.1.113883.3.464.1003.109.12.1011)"

Credible Form Additions:

None.

Population Criteria:

- **Initial Population =**
    - AND: Age>= 18 year(s) at: "Measurement Period"
    - AND: Age< 85 year(s) at: "Measurement Period"
    - AND: "Occurrence A of Diagnosis: Essential Hypertension" satisfies any:
        - < 6 month(s) starts after start of "Measurement Period"
        - satisfies all:
            - starts before start of "Measurement Period"
            - overlaps "Measurement Period"
    - AND: Union of:

        - "Encounter, Performed: Office Visit"
        - "Encounter, Performed: Face-to-Face Interaction"
        - "Encounter, Performed: Preventive Care Services - Established Office Visit, 18 and Up"
        - "Encounter, Performed: Preventive Care Services-Initial Office Visit, 18 and Up"
        - "Encounter, Performed: Home Healthcare Services"
        - "Encounter, Performed: Annual Wellness Visit"
        - during "Measurement Period"
- **Denominator =**
    - AND: Initial Population
- **Denominator Exclusions =**
    - OR: Union of:
        - "Diagnosis: Pregnancy"
        - "Diagnosis: End Stage Renal Disease"
        - "Diagnosis: Chronic Kidney Disease, Stage 5"
        - overlaps "Measurement Period"
    - OR: Union of:
        - "Procedure, Performed: Vascular Access for Dialysis"
        - "Encounter, Performed: ESRD Monthly Outpatient Services"
        - "Procedure, Performed: Kidney Transplant"
        - "Procedure, Performed: Dialysis Services"
        - "Intervention, Performed: Other Services Related to Dialysis"
        - "Intervention, Performed: Dialysis Education"
        - starts before end of "Measurement Period"
- **Numerator =**
    - AND: Most Recent:
        - "Occurrence A of Encounter, Performed: Adult Outpatient Visit" satisfies all:
            - overlaps "Occurrence A of Diagnosis: Essential Hypertension"
            - during "Measurement Period"
            - overlaps "Physical Exam, Performed: Diastolic Blood Pressure (result)"
            - overlaps "Physical Exam, Performed: Systolic Blood Pressure (result)"
    - AND: "Physical Exam, Performed: Diastolic Blood Pressure" satisfies all:
        - Most Recent: during "Occurrence A of Encounter, Performed: Adult Outpatient Visit"
        - (result < 90 mmHg)
    - AND: "Physical Exam, Performed: Systolic Blood Pressure" satisfies all:
        - Most Recent: during "Occurrence A of Encounter, Performed: Adult Outpatient Visit"
        - (result < 140 mmHg)
- **Numerator Exclusions =**
    - None
- **Denominator Exceptions =**
    - None
- **Stratification =**
    - None

Rationale:

Hypertension, or high blood pressure, is a very common and dangerous condition that increases risk for heart disease and stroke, two of the leading causes of death for Americans (Farley et al., 2010). Compared with other dietary, lifestyle, and metabolic risk factors, high blood pressure is the leading cause of death in women and the second-leading cause of death in men, behind smoking (Danaei et al., 2011). Approximately 1 in 3 U.S. adults, or about 70 million people, have high blood pressure but only about half (52%) of these people have their high blood pressure under control. Additionally, data from NHANES 2011 to 2012 found that 17.2% of U.S. adults are not aware they have hypertension (Nwankwo et al., 2013). Projections show that by 2030, approximately 41.4% of US adults will have hypertension, an increase of 8.4% from 2012 estimates (Heidenreich et al., 2011).

The estimated direct and indirect cost of high blood pressure for 2011 is $46.4 billion. This total includes direct costs such as the cost of physicians and other health professionals, hospital services, prescribed medications and home health care, as well as indirect costs due to loss of productivity from premature mortality (Mozaffarian et al., 2015). Projections show that by 2030, the total cost of high blood pressure could increase to an estimated $274 billion (Heidenreich et al., 2011).

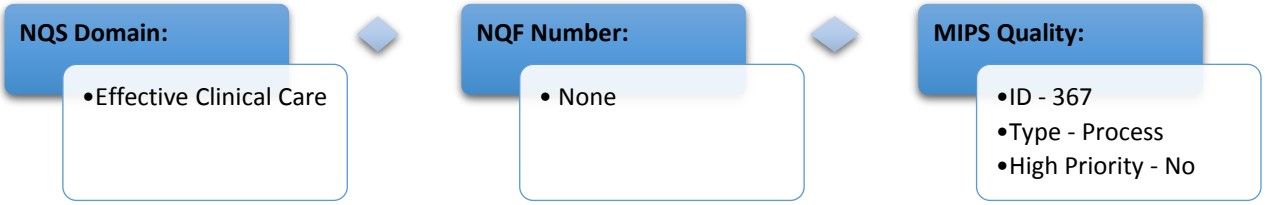
Better control of blood pressure has been shown to significantly reduce the probability that undesirable and costly outcomes will occur. In clinical trials, antihypertensive therapy has been associated with reductions in stroke incidence (35-40%), myocardial infarction (20-25%) and heart failure (>50%) (Chobanian et al., 2003). Thus, the relationship between the measure (control of hypertension) and the long-term clinical outcomes listed is well established.

Clinical Recommendation Statement:

The United States Preventive Services Task Force (2007) recommends screening for high blood pressure in adults age 18 years and older. This is a grade A recommendation.

Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2003): Treating systolic blood pressure and diastolic blood pressure to targets that are <140/90 mmHg is associated with a decrease in cardiovascular disease complications.

Measure: 169v5: Bipolar Disorder and Major Depression: Appraisal for alcohol or chemical substance use



Measure Description:

Percentage of patients with depression or bipolar disorder with evidence of an initial assessment that includes an appraisal for alcohol or chemical substance use.

Measure Definition:

None.

Measure Guidance:

The intent of the measure is that the assessment be performed for a single episode for each patient. Due to current limitations of the eMeasure specification system, it is possible for there to be up to two treatment episodes per patient, identified through up to two index episodes. As a result, the numerator criteria of this measure can be satisfied if a substance use assessment is performed within either treatment episode. Future versions of the measure should address this issue.

Improvement Notation:

Higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
Patients 18 years of age or older at the start of the measurement period with a new diagnosis of unipolar depression or bipolar disorder during the first 323 days of the measurement period, and evidence of treatment for unipolar depression or bipolar disorder	Equals Initial Population	None	Patients in the denominator with evidence of an assessment for alcohol or other substance use following or concurrent with the new diagnosis, and prior to or concurrent with the initiation of treatment for that diagnosis.	None

within 42 days of diagnosis. The existence of a 'new diagnosis' is established by the absence of diagnoses and treatments of unipolar depression or bipolar disorder during the 180 days prior to the diagnosis.			*(see note below)*	

➞ *Note: the endorsed measure calls for the assessment to be performed prior to discussion of the treatment plan with the patient, but the current approach was considered more feasible in an EHR setting. The "Assessment for Alcohol or Other Drug Use" required in the numerator is meant to capture a provider's assessment of the patient's symptoms of substance use. The essence of the measure is to avoid treating the patient for unipolar depression or bipolar disorder without an assessment of their use of alcohol or other drugs.*

Value Sets / Data Criteria:

- "Diagnosis, Active: BH Condition Involving Bipolar Disorder" using "BH Condition Involving Bipolar Disorder Grouping Value Set (2.16.840.1.113883.3.1257.1.1504)"
- "Diagnosis, Active: BH Condition Involving Unipolar Depression" using "BH Condition Involving Unipolar Depression Grouping Value Set (2.16.840.1.113883.3.1257.1.1505)"
- "Encounter, Order: BH Outpatient Psychotherapy" using "BH Outpatient Psychotherapy Grouping Value Set (2.16.840.1.113883.3.1257.1.973)"
- "Encounter, Performed: BH Outpatient encounter" using "BH Outpatient encounter Grouping Value Set (2.16.840.1.113883.3.464.1.49)"
- "Encounter, Performed: BH Outpatient Psychotherapy" using "BH Outpatient Psychotherapy Grouping Value Set (2.16.840.1.113883.3.1257.1.973)"
- "Medication, Active: BH Antidepressant Medication" using "BH Antidepressant Medication Grouping Value Set (2.16.840.1.113883.3.1257.1.972)"
- "Medication, Active: BH Mood Stabilizer Medication" using "BH Mood Stabilizer Medication Grouping Value Set (2.16.840.1.113883.3.1257.1.950)"
- "Medication, Order: BH Antidepressant Medication" using "BH Antidepressant Medication Grouping Value Set (2.16.840.1.113883.3.1257.1.972)"
- "Medication, Order: BH Mood Stabilizer Medication" using "BH Mood Stabilizer Medication Grouping Value Set (2.16.840.1.113883.3.1257.1.950)"
- "Procedure, Order: BH Counseling for Depression" using "BH Counseling for Depression Grouping Value Set (2.16.840.1.113883.3.1257.1.1616)"
- "Procedure, Order: BH Electroconvulsive Therapy" using "BH Electroconvulsive Therapy Grouping Value Set (2.16.840.1.113883.3.1257.1.1533)"
- "Procedure, Performed: BH Assessment for Alcohol or Other Drugs" using "BH Assessment for Alcohol or Other Drugs Grouping Value Set (2.16.840.1.113883.3.1257.1.1604)"
- "Procedure, Performed: BH Counseling for Depression" using "BH Counseling for Depression Grouping Value Set (2.16.840.1.113883.3.1257.1.1616)"
- "Procedure, Performed: BH Electroconvulsive Therapy" using "BH Electroconvulsive Therapy Grouping Value Set (2.16.840.1.113883.3.1257.1.1533)"

Credible Form Additions:

None.

Population Criteria:

- **Initial Population =**
  - AND: Age >= 18 year(s) at: "Measurement Period"
  - AND: Occurrence A of $BHEncounter
  - AND: Union of:
    - "Diagnosis, Active: BH Condition Involving Unipolar Depression"
    - "Diagnosis, Active: BH Condition Involving Bipolar Disorder"
    - starts during Occurrence A of $BHEncounter
  - AND: $Treatments <= 42 day(s) starts after start of Occurrence A of $BHEncounter
  - AND NOT: Occurrence A of $BHEncounter < 180 day(s) starts after start of Union of:
    - "Encounter, Performed: BH Outpatient encounter" satisfies any
      - during "Diagnosis, Active: BH Condition Involving Bipolar Disorder"
      - during "Diagnosis, Active: BH Condition Involving Unipolar Depression"
    - "Encounter, Performed: BH Outpatient encounter" satisfies any
      - during "Medication, Active: BH Antidepressant Medication"
      - during "Medication, Active: BH Mood Stabilizer Medication"
    - Union of:
      - "Diagnosis, Active: BH Condition Involving Unipolar Depression"
      - "Diagnosis, Active: BH Condition Involving Bipolar Disorder"
      - starts during Occurrence A of $BHEncounter
    - $Treatments
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND: "Procedure, Performed: BH Assessment for Alcohol or Other Drugs" satisfies all
    - satisfies any
      - starts after start of Occurrence A of $BHEncounter
      - = 0 day(s) starts before start of Occurrence A of $BHEncounter
    - satisfies any
      - starts before start of
        - First: $Treatments <= 42 day(s) starts after start of Occurrence A of $BHEncounter
      - = 0 day(s) starts after start of
        - First: $Treatments <= 42 day(s) starts after start of Occurrence A of $BHEncounter
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**
  - None

Data Criteria (QDM Variables)

- **$BHEncounter =**
  - "Encounter, Performed: BH Outpatient encounter" satisfies all
    - >= 42 day(s) starts before end of "Measurement Period"
    - starts after start of "Measurement Period"
- **$Treatments =**

- Union of:
  - "Procedure, Performed: BH Electroconvulsive Therapy"
  - "Procedure, Order: BH Electroconvulsive Therapy"
  - "Medication, Order: BH Antidepressant Medication"
  - "Medication, Order: BH Mood Stabilizer Medication"
  - "Procedure, Performed: BH Counseling for Depression"
  - "Procedure, Order: BH Counseling for Depression"
  - "Encounter, Order: BH Outpatient Psychotherapy"
  - "Encounter, Performed: BH Outpatient Psychotherapy"

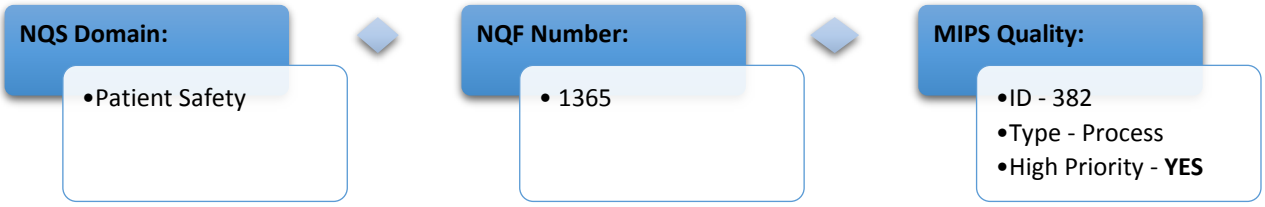
Rationale:

Individuals with bipolar disorder or major depression have high rates of co-morbid substance abuse and should be screened for substance use disorders. Between 40-70% of people with bipolar disorder have a history of substance use disorder. A current or past co-morbid substance use disorder may lead to worse outcomes for bipolar disorders, including more symptoms, more suicide attempts, longer episodes and lower quality of life. Substance abuse may obscure or exacerbate mood swings that have no other apparent external cause. Substance abuse may also precipitate mood episodes or be used by patients to self-treat in an attempt to improve the symptoms of episodes. Patients suffering from major depressive disorder with co-morbid addiction are more likely to require hospitalization, more likely to attempt suicide and less likely to comply with treatment than are patients with these disorders of similar severity not complicated by these factors.

Clinical Recommendation Statement:

Perform a diagnostic evaluation to assess the presence of an alcohol or substance use disorder or other factors that may contribute to the disease process or complicate its treatment. A complete diagnosis of depression should address history of substance use and treatment for substance use disorders.

Measure: 177v5: Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment



Measure Description:

Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk.

Measure Definition:

Numerator Definition: The specific type and magnitude of the suicide risk assessment is intended to be at the discretion of the individual clinician and should be specific to the needs of the patient. At a minimum, suicide risk assessment should evaluate:

1. *Risk (e.g., age, sex, stressors, comorbid conditions, hopelessness, impulsivity) and protective factors (eg, religious belief, concern not to hurt family) that may influence the desire to attempt suicide.*
2. *Current severity of suicidality.*
3. *Most severe point of suicidality in episode and lifetime.*

Low burden tools to track suicidal ideation and behavior such as the Columbia-Suicidal Severity Rating Scale can also be used.

Measure Guidance:

A suicide risk assessment should be performed at every visit for major depressive disorder during the measurement period.

This measure is an episode-of-care measure; the level of analysis for this measure is every visit for major depressive disorder during the measurement period. *For example, at every visit for MDD, the patient should have a suicide risk assessment.*

Use of a standardized tool or instrument to assess suicide risk will meet numerator performance. Standardized tools can be mapped to the concept "Intervention, Performed: Suicide Risk Assessment" included in the numerator logic below.

Improvement Notation

Higher score indicates better quality.

Reporting Criteria:

Initial Patient Population	Denominator Statement	Denominator Exclusions	Numerator Statement	Numerator Exclusions
All patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder	Equals Initial Population	None	Patient visits with an assessment for suicide risk	None

Value Sets / Data Criteria:

- "Diagnosis, Active: Major Depressive Disorder-Active" using "Major Depressive Disorder-Active Grouping Value Set (2.16.840.1.113883.3.526.3.1491)"
- "Encounter, Performed: Face-to-Face Interaction" using "Face-to-Face Interaction Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1048)"
- "Encounter, Performed: Group Psychotherapy" using "Group Psychotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1187)"
- "Encounter, Performed: Office Visit" using "Office Visit Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Outpatient Consultation" using "Outpatient Consultation Grouping Value Set (2.16.840.1.113883.3.464.1003.101.12.1008)"
- "Encounter, Performed: Psych Visit - Diagnostic Evaluation" using "Psych Visit - Diagnostic Evaluation Grouping Value Set (2.16.840.1.113883.3.526.3.1492)"
- "Encounter, Performed: Psych Visit - Family Psychotherapy" using "Psych Visit - Family Psychotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1018)"
- "Encounter, Performed: Psych Visit - Psychotherapy" using "Psych Visit - Psychotherapy Grouping Value Set (2.16.840.1.113883.3.526.3.1496)"
- "Encounter, Performed: Psychoanalysis" using "Psychoanalysis Grouping Value Set (2.16.840.1.113883.3.526.3.1141)"
- "Intervention, Performed: Suicide Risk Assessment" using "Suicide Risk Assessment Grouping Value Set (2.16.840.1.113883.3.526.3.1484)"

Credible Form Additions:

The following coded form questions are necessary to capture the documentation that the eligible professional performed a suicide risk assessment as defined in the measure description, guidance and clinical recommendation statement.

SNOMEDCT and LOINC Codes are a necessary component of this measure and data capture and calculation and are added to each question in the Form Builder as noted.

Question: Suicide risk assessment (procedure) (SNOMED 225337009)

- Performed (SNOMEDCT 398166005)
- Not performed due to Medical Reason: Procedure contraindicated (situation) (SNOMEDCT 183932001)
- Not performed due to Medical Reason: Complication of medical care (disorder) (SNOMEDCT 35688006)
- Not performed due to Patient Reason: Patient non-compliant - refused intervention / support (situation) (SNOMEDCT 413311005)
- Not performed due to Patient Reason: Refused (qualifier value) (SNOMEDCT 443390004)

Population Criteria:

- **Initial Population =**
  - AND: Age >= 6 year(s) at: "Measurement Period"
  - AND: Age < 17 year(s) at: "Measurement Period"
  - AND: "Diagnosis, Active: Major Depressive Disorder-Active" overlaps Occurrence A of $MDDEncounters177
- **Denominator =**
  - AND: Initial Population
- **Denominator Exclusions =**
  - None
- **Numerator =**
  - AND: "Intervention, Performed: Suicide Risk Assessment" during Occurrence A of $MDDEncounters177
- **Numerator Exclusions =**
  - None
- **Denominator Exceptions =**
  - None
- **Stratification =**
  - None

Data Criteria (QDM Variables)

- **$MDDEncounters177 =**
  - Union of:
    - "Encounter, Performed: Office Visit"
    - "Encounter, Performed: Outpatient Consultation"
    - "Encounter, Performed: Face-to-Face Interaction"
    - "Encounter, Performed: Psych Visit - Diagnostic Evaluation"
    - "Encounter, Performed: Psych Visit - Family Psychotherapy"
    - "Encounter, Performed: Psychoanalysis"
    - "Encounter, Performed: Group Psychotherapy"
    - "Encounter, Performed: Psych Visit - Psychotherapy"
    - during "Measurement Period"

Rationale:

Research has shown that patients with major depressive disorder are at a high risk for suicide, which makes this assessment an important aspect of care that should be assessed at each visit. According to a study analyzing the quality of health care in the United States, only about 25.8% of patients with depression had documentation of the presence or absence of suicidal ideation during the first or second diagnostic visit. 76.11% of those patients who have suicidality were asked if they have specific plans to carry out suicide. A 2003 study reviewed medical records to assess the degree to which providers adhered to depression guidelines in a VA primary care setting. Providers documented exploration for suicidal ideation in 57% of the records.

Clinical Recommendation Statement:

The evaluation must include assessment for the presence of harm to self or others (MS). (AACAP)

Suicidal behavior exists along a continuum from passive thoughts of death to a clearly developed plan and intent to carry out that plan. Because depression is closely associated with suicidal thoughts and behavior, it is imperative to evaluate these symptoms at the initial and subsequent assessments. For this purpose, low burden tools to track suicidal ideation and behavior such as the Columbia-Suicidal Severity Rating Scale can be used. Also, it is crucial to evaluate the risk (e.g., age, sex, stressors, comorbid conditions, hopelessness, impulsivity) and protective factors (e.g., religious belief, concern not to hurt family) that might influence the desire to attempt suicide. The risk for suicidal behavior increases if there is a

history of suicide attempts, comorbid psychiatric disorders (e.g., disruptive disorders, substance abuse), impulsivity and aggression, availability of lethal agents (e.g., firearms), exposure to negative events (e.g., physical or sexual abuse, violence), and a family history of suicidal behavior. (AACAP)

A careful and ongoing evaluation of suicide risk is necessary for all patients with major depressive disorder (Category I). Such an assessment includes specific inquiry about suicidal thoughts, intent, plans, means, and behaviors; identification of specific psychiatric symptoms (e.g., psychosis, severe anxiety, substance use) or general medical conditions that may increase the likelihood of acting on suicidal ideas; assessment of past and, particularly, recent suicidal behavior; delineation of current stressors and potential protective factors (e.g., positive reasons for living, strong social support); and identification of any family history of suicide or mental illness (Category I). (APA)

Definitions

Communication: An approved visit with a form question having answers coded to the measure's SNOMED values

Encounter: In Credible, Visits are used to represent the client's encounters.

The visit:

1) must be approved (ClientVisit.appr = 1)
2) must be credited to the employee being reported on (ClientVisit.emp_id = the CQM report employee)
3) must match the CPT/HCPCS code needed by the measure (ClientVisit.cpt_code) OR the BillingMatrix External Code matches the SNOMED code needed by the measure (BillingMatrix.external_code)
4) and be in the appropriate date range (ClientVisit.rev_timein)

note: For **Encounter Location**, 'Ambulatory' (SNOEMD 255327002) uses the visit location's Place of Service code (Location.place_of_svc). Ambulatory is any place of service EXCEPT: '09', '19', '21', '23', '51', '52', and '54'

Intervention: An approved visit with form question with answers coded to the measure's SNOMED values OR an approved visit where the CPT/HCPCS code matches what is needed by the measure (ClientVisit.cpt_code)

Intervention Attribute and **Intervention Not Done**: An approved visit with form questions coded to SNOMED with answers also coded to the measure's SNOMED values

Medication Order: CQMs use medications that have been prescribed (via Create Prescription) to the client. The prescription can be printed, faxed, or sent electronically. Medications match on the RxNorm ID (Meds. rx_norm_id and MedHistory.rx_norm_id). The start date comes from the earliest start date for a specific medication (across multiple prescriptions but for the same RxNorm ID). The end date comes from the discontinued date.

Medication Dispensed: The medication can be prescribed (via Create Prescription) or added (via Add Medication). The medication must match on the RxNorm ID (Meds. rx_norm_id and MedHistory.rx_norm_id). The medication must have an eMAR schedule. The medication must have been given to the client during the date range.

Patient Characteristic Payer: Uses the client's insurances. The insurance must be active during the date range of the reporting period. Only the highest ordered insurance (1 is highest, 9 is lowest). If the client has multiple insurances at the same order that were active, the insurance ending most recently will be used.

The payer must have the Source of Payment Typology Configured. If the payer's Source of Payment Typology is not configured, the following logic is used:

Payer is flagged as Self Pay: '81' --Self-pay

If the payer is NOT flagged as Self Pay, the Payer's class code is used as followed:

'AM' THEN '96' -- Auto Insurance (no fault)
'BL' THEN '6' --BLUE CROSS/BLUE SHIELD
'CH' THEN '311' --TRICARE (CHAMPUS)
'CI' THEN '5' --PRIVATE HEALTH INSURANCE
'DS' THEN '93' --Disability Insurance
'HM' THEN '511' --Commercial Managed Care - HMO
'LI' THEN '9' --MISCELLANEOUS/OTHER
'LM' THEN '9' --MISCELLANEOUS/OTHER
'MC' THEN '2' --MEDICAID
'MA' THEN '1' --MEDICARE
'MB' THEN '1' --MEDICARE
'OF' THEN '3' --OTHER GOVERNMENT (Federal/State/Local)

'TV' THEN '341' --Title V (MCH Block Grant)
'VA' THEN '32' --Department of Veterans Affairs
'WC' THEN '95' --Worker's Compensation
'ZZ' THEN '9' --MISCELLANEOUS/OTHER
And if the class code does not match any of the above: '9' --MISCELLANEOUS/OTHER

Patient Characteristic Birth Date: Uses the Client's date of birth field (Clients.dob)

Patient Characteristic Date of Death Date: Uses the Client's date of death field (Clients.date_of_death)

Patient Characteristic Gender: Uses the client's sex field (Clients.sex) as follows:

M = Male
F = Female
Any other value = Unknown

Patient Characteristic Race: Uses the Client Profile field configured for Race-A under Admin > HL7 Settings. By default this will be Clients.race_omb. The field must be a lookup with the lookup's HL7 Code configured to valid LOINC race codes.

Patient Characteristic Ethnicity: Uses the Client Profile field configured for Ethnicity under Admin > HL7 Settings. By default this will be Clients.ethnicity_omb. The field must be a lookup with the lookup's HL7 Code configured to valid LOINC ethnicity codes.

Physical Exam: Uses the Client Medical Profile for the following values. The Medical Profile must have an effective date in the date range of the report (ClientMedicalProfile.effective_date)

BMI (ClientMedicalProfile.bmi)
Height (ClientMedicalProfile.height_ft and (ClientMedicalProfile.height_in converted total inches)
Weight (ClientMedicalProfile.weight)
Blood Pressure ('regular' , then standing, then lying; the blood pressure must have both Systolic and diastolic values to be considered, only the first pair in that sequence will be used

ClientMedicalProfile.bloodpressure_top AND ClientMedicalProfile.bloodpressure_top
then
ClientMedicalProfile.standing_bp_top AND ClientMedicalProfile.standing_bp_bottom
then
ClientMedicalProfile.lying_bp_top AND ClientMedicalProfile.lying_bp_bottom

Physical Exam, Performed not done: An approved visit with form questions coded to LOINC with answers coded to the measure's SNOMED values

Problem/Diagnosis: Diagnosis information comes from the Multi-Axial and Problem List assessments. CQMs use three value sets to select the diagnosis: SNOMED, ICD-10, and ICD-9.

Credible allows all three to be recorded and will match on:

the SNOMED code first (ClientAxisDetail.snomed_cid),

then the ICD-10 code (ClientAxisDetail.icd10_code),

then finally ICD-9 (ClientAxisDetail.axis_code).

The start date comes from the Diagnosed Date in the diagnosis details (ClientAxisDetail.diagnosed_date) and if left blank, from the Effective Date for the assessment (ClientAxis.effective_date). The end date comes from the Resolved Date in the diagnosis details ((ClientAxisDetail.date_resolved).

Procedure: An approved visit where the CPT/HCPCS code matches what is needed by the measure (ClientVisit.cpt_code)

Procedure Not Done: An approved visit with form questions coded to SNOMED with answers also coded to the measure's SNOMED values

Risk Category Assessment and **Risk Category Assessment Not Done**: An approved visit with form questions coded to LOINC with answers coded to the measure's SNOMED values

Risk Category Assessment for CMS 139: An approved visit with form question coded to LOINC and an answer coded to SNOMED 398166005 for 'Performed'

Risk Category Assessment for PHQ-9 measures: An approved visit with form question coded to LOINC and a numeric answer for the PHQ-9 score