eMeasure Title	Preventive Care and Screening: Screening for Depression and Follow-Up Plan		
eMeasure Identifier (Measure Authoring Tool)	2	eMeasure Version number	6.3.000
NQF Number	0418	GUID	9a031e24-3d9b-11e1-8634-00237d5bf174
Measurement Period	January 1, 20XX through December 31, 20XX		
Measure Steward	Centers for Medicare & Medicaid Services (CMS)		
Measure Developer	Quality Insights of Pennsylvania		
Endorsed By	National Quality Forum		
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		
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Disclaimer	These performance measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications. THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.		
Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	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).
Improvement Notation	Higher score indicates better quality
Reference	Pratt L.A, Brody DJ.(2008). Depression in the United States household population, 2005-2006. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention National Center for Health Statistics. NCHS Data Brief No.7, 1-8.
Reference	Borner I, Braunstein JW, St. Victor, R, Pollack J (2010). Evaluation of a 2-question screening tool for detecting depression in adolescents in Primary Care. Clinical Pediatrics, 49, 947-995. doi: 10.1177/0009922810370203
Reference	Coyle J T, Pine D.S, Charney D S, Lewis L, Nemeroff C B, Carlson G A, Joshi P T (2003). Depression and bipolar support alliance consensus development panel. Depression and bipolar support alliance consensus statement on the unmet needs in diagnosis and treatment of mood disorders in children and adolescents. Journal of the American Academy of Child and Adolescent Psychiatry, 42, 1494-1503.
Reference	U.S. Department of Health and Human Services (2014). Healthy People 2020. Washington, DC: U.S. Department of Health and Human Services. Retrieved from: http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=28
Reference	Williams SB. O'Connor EA, Eder M, Whitlock EP (2009). Screening for Child and Adolescent Depression in Primary Care Setting: A Systematic Evidence Review for the US Preventive Services Task Force. Pediatrics, 123, e716-e735. doi:10.1542/peds.2008-2415
Reference	Zalsman G, Brent DA & Weersing VR (2006). Depressive disorders in childhood and adolescence: an overview: epidemiology, clinical manifestation and risk factors. Child Adolesc Psychiatr Clin N Am. 2006;15:827-841
Reference	Agency for Healthcare Research and Quality (2010). The Guide to Clinical Preventive Services 2010-2011: Recommendations of the U.S. Preventive Services Task Force. Retrieved from: http://www.ncbi.nlm.nih.gov/books/NBK56707/
Reference	Wilkinson J, Bass C, Diem S, Gravley A, Harvey L, Maciosek M, McKeon K, Milteer L, Owens J, Rothe P, Snellman L, Solberg L, Vincent P. Institute for Clinical Systems Improvement. Preventive Services for Children and Adolescents. Updated September 2013. https://www.icsi.org/_asset/x1mnv1/PrevServKids.pdf
Reference	Centers for Disease Control and Prevention (2007). Web-based injury statistics query and reporting system (WISQARS), National Center for Injury Prevention and Control, 2005. Retrieved from: http://www.cdc.gov/injury/wisqars/index.html
Reference	Geriatric Mental Health Foundation (2008). Depression in late life: not a natural part of aging, 2008. Retrieved from: http://www.aagponline.org/index.php?src=gendocs&ref=depression&category=Foundation
Reference	Steinman LE, Frederick JT, Prohaska T, Satariano WA, Dornberg-Lee S, Fisher R, ...Snowden M (2007). Recommendations for treating depression in community-based older adults. American Journal of Preventive Medicine,

	33(3), 175-81. Retrieved from: www.ajpm-online.net/article/S0749-3797%2807%2900330-3/abstract
Reference	Mitchell J, Trangle M, Degnan B, Gabert T, Haight B, Kessler D, Mack N, Mallen E, Novak H, Rossmiller D, Setterlund L, Somers K, Valentino N, Vincent S. Institute for Clinical Systems Improvement. Adult Depression in Primary Care. Updated September 2013. https://www.icsi.org/_asset/fnhdm3/Depr.pdf

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)
	  * Patient Health Questionnaire (PHQ-9)
	  * Pediatric Symptom Checklist (PSC-17)
	  * 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-PHQ2
	
	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

Guidance	A 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."
Transmission Format	TBD
Initial Population	All patients aged 12 years and older before the beginning of the measurement period with at least one eligible encounter during the measurement period
Denominator	Equals Initial Population
Denominator Exclusions	Patients with an active diagnosis for Depression or a diagnosis of Bipolar Disorder
Numerator	Patients screened for depression on the date of the encounter using an age appropriate standardized tool AND if positive, a follow-up plan is documented on the date of the positive screen
Numerator Exclusions	Not Applicable
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
Supplemental	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

Preventive Care and Screening: Screening for Depression and Follow-Up Plan

Table of Contents

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

Data Criteria (QDM Variables)

- None

Data Criteria (QDM Data Elements)

- "Diagnosis: Bipolar Diagnosis" using "Bipolar Diagnosis Grouping Value Set (2.16.840.1.113883.3.600.450)"
- "Diagnosis: 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)"

Supplemental Data Elements

- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity CDCREC Value Set (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer" using "Payer SOP Value Set (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race CDCREC Value Set (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: ONC Administrative Sex" using "ONC Administrative Sex AdministrativeGender Value Set (2.16.840.1.113762.1.4.1)"

Risk Adjustment Variables

- None

Measure Set	Preventive Care and Screening