

eCQM Title	Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment		
eCQM Identifier (Measure Authoring Tool)	177	eCQM Version Number	13.0.000
CBE Number	Not Applicable	GUID	848d09de-7e6b-43c4-bedd-5a2957ccfe3
Measurement Period	January 1, 20XX through December 31, 20XX		
Measure Steward	Mathematica		
Measure Developer	Mathematica		
Measure Developer	American Medical Association (AMA)		
Measure Developer	PCPI(R) Foundation (PCPI(R))		
Endorsed By	None		
Description	Percentage of patient visits for those patients aged 6 through 16 at the start of the measurement period with a diagnosis of major depressive disorder (MDD) with an assessment for suicide risk		
Copyright	Copyright 2024 Mathematica Inc. All Rights Reserved. The PCPI and American Medical Association's (AMA) significant past efforts and contributions to the development and updating of the Measure is acknowledged.		
Disclaimer	The Measure is not a clinical guideline, does not establish a standard of medical care, and has not been tested for all potential applications.		
	The Measure, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, e.g., use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the Measure for commercial gain, or incorporation of the Measure into a product or service that is sold, licensed or distributed for commercial gain.		
	Commercial uses of the Measure require a license agreement between the user and Mathematica. Neither Mathematica, the PCPI, nor the American Medical Association (AMA), nor the former AMA-convened Physician Consortium for Performance Improvement(R) (AMA-PCPI), nor their members shall be responsible for any use of the Measure.		
	Mathematica encourages use of the Measure by other health care professionals, where appropriate. THE MEASURE AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. Limited proprietary coding may be contained in the Measure specifications for convenience. A license agreement must be entered prior to a third party's use of Current Procedural Terminology (CPT(R)) or other proprietary code set contained in the Measure. Any other use of CPT or other coding by a third party is strictly prohibited. Mathematica, the AMA, and former members of the PCPI disclaim all liability for use or accuracy of any CPT(R) or other coding contained in the specifications.		
Copyright	CPT(R) contained in the Measure specifications is copyright 2004-2023 American Medical Association. LOINC(R) is copyright 2004-2023 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms(R) (SNOMED CT(R)) copyright 2004-2023 International Health Terminology Standards Development Organisation. ICD-10 is copyright 2023 World Health Organization. All Rights Reserved. Due to technical limitations, registered trademarks are indicated by (R) or [R].		
Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	Research has shown that youth with major depressive disorder (MDD) are at a high risk for suicide attempts and completion - among the most significant and devastating sequelae of the disease (Fontanella et al., 2020). Suicide risk is a critical consideration in children and adolescents with MDD, and an important aspect of care that should be assessed at each visit and subsequently managed to minimize that risk. Additionally, the importance of the assessments is underscored by research (Fontanella et al., 2020; Luoma, Martin, & Pearson, 2002) that indicates that many individuals who die by suicide do make contact with primary care providers and mental health services beforehand. More specifically, approximately 15% of suicide victims aged 35 years or younger had seen a mental health professional within 1 month of suicide while approximately 23% had seen a primary care provider within 1 month of suicide (Luoma, Martin, & Pearson, 2002). A recent analysis of depression severity and suicidal ideation symptom trajectories (Witt et al., 2021) found that suicidal ideation among children and young adults (15-25 years) might not improve with depression symptom severity. This evidence suggests the potential utility of continued suicide risk screening even after improvements in depression symptoms. Better assessment and identification of suicide risk in the health care setting should lead to improved connection to treatment and reduction in suicide attempts and deaths by suicide.		
Clinical Recommendation Statement	The evaluation must include assessment for the presence of harm to self or others (Birmaher et al., 2007).		
	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 (Birmaher et al., 2007).		
Improvement Notation	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) (Gelenberg et al., 2010).		
Reference	Higher score indicates better quality Reference Type: CITATION Reference Text: Birmaher, B., American Academy of Child and Adolescent Psychiatry Work Group on Quality Issues, Bernert, W., Bukstein, O., Walter, H., Benson, R. S., Chrisman, A., Farchione, T., Greenhill, L., Hamilton, J., Keable, H., Kinlan, J., Schoettle, U., Stock, S., Piatkowski Kroeger, K., Medicus, J. (2007). Practice parameter for the assessment and treatment of children and adolescents with depressive disorders. <i>Journal of the American Academy of Child and Adolescent Psychiatry</i> , 46(11), 1503-1526. doi:10.1097/chi.0b013e318145ae1c		
Reference	Reference Type: CITATION Reference Text: Gelenberg, A. J., Freeman, M. P., Markowitz, J. C., Rosenbaum, J. F., Thase, M. E., Trivedi, M. H., Van Rood, R. S., Reus, V. I., Raymond DePaulo Jr., J., Fawcett, J. A., Schneek, C. D., Silbersweig, D. A. (2010). Practice guideline for the treatment of patients with major depressive disorder. 3rd edition. Retrieved from http://psychiatryonline.org/pb/assets/raw/stewide/practice_guidelines/guidelines/mdd.pdf		
Reference	Reference Type: CITATION Reference Text: Fontanella, C. A., Warner, L. A., Steelesmith, D., Bridge, J. A., Sweeney, H. A., Campo, J. V. (2020). Clinical profiles and health services patterns of Medicaid-enrolled youths who died by suicide. <i>Journal of the American Medical Association Pediatrics</i> , 174(5), 470-477. doi:10.1001/jamapediatrics.2020.0002		
Reference	Reference Type: CITATION Reference Text: Luoma, J. B., Martin, C. E., & Pearson, J. L. (2002). Contact with mental health and primary care providers before suicide: A review of the evidence. <i>American Journal of Psychiatry</i> , 159(6), 909-916. doi:10.1176/appi.ajp.159.6.909		
Reference	Reference Type: CITATION Reference Text: Witt, K., Madsen, T., Berk, M., Dean, O., Chanen, A., McGorry, P.D., Cotton, S., Davey, C.G., Hetrick, S. (2021). Trajectories of change in depression symptoms and suicidal ideation over the course of evidence-based treatment for depression: Secondary analysis of a randomized controlled trial of cognitive behavioral therapy plus fluoxetine in young people. <i>Australian and New Zealand Journal of Psychiatry</i> , 55(5), 506-516. doi:10.1177/0004867421998763		
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 (e.g., 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. Because no validated assessment tool or instrument fully meets the aforementioned requirements for the suicide risk assessment, individual tools or instruments have not been explicitly included in coding.		
Guidance	This electronic clinical quality measure (eCQM) is an episode-based measure. An episode is defined as each eligible encounter for major depressive disorder (MDD) during the measurement period. A suicide risk assessment should be performed at every visit for MDD during the measurement period.		
	In recognition of the growing use of integrated and team-based care, the diagnosis of depression and the assessment for suicide risk need not be performed by the same provider or clinician. Suicide risk assessments completed via telehealth services can also meet numerator performance. Use of a standardized tool(s) or instrument(s) to assess suicide risk will meet numerator performance, so long as the minimum criteria noted above is evaluated. Standardized tools can be mapped to the concept "Intervention, Performed": "Suicide risk assessment (procedure)" included in the numerator logic below, as no individual suicide risk assessment tool or instrument would satisfy the requirements alone. To ensure all patients with major depressive disorder (MDD) are assessed for suicide risk, there are two clinical quality measures addressing suicide risk assessment; CMS177 covers children and adolescents aged 6 through 16 at the start of the measurement period, and CMS161 - Adult Major Depressive Disorder (MDD): Suicide Risk Assessment covers the adult population aged 17 years and older at the start of the measurement period. This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.		
Transmission Format	TBD		
Initial Population	All patient visits for those patients aged 6 through 16 at the start of the measurement period with a diagnosis of major depressive disorder		
Denominator	Equals Initial Population		
Denominator Exclusions	None		
Numerator	Patient visits with an assessment for suicide risk		
Numerator Exclusions	Not Applicable		
Denominator Exceptions	None		
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex		

Table of Contents

- [Population Criteria](#)
- [Definitions](#)
- [Functions](#)
- [Terminology](#)
- [Data Criteria \(QDM Data Elements\)](#)
- [Supplemental Data Elements](#)
- [Risk Adjustment Variables](#)

Population Criteria

Initial Population

```
"Major Depressive Disorder Encounter" MDDEncounter
where "AgeInYearsAt"(date from start of "Measurement Period") >= 6
and "AgeInYearsAt"(date from start of "Measurement Period") <= 16
```

Denominator

```
"Initial Population"
```

Denominator Exclusions

```
None
```

Numerator

```
"Major Depressive Disorder Encounter" MDDEncounter
with ["Intervention, Performed": "Suicide risk assessment (procedure)"] SuicideRiskAssessment
such that Global."NormalzeInterval" ( SuicideRiskAssessment.relevantDatetime, SuicideRiskAssessment.relevantPeriod ) during MDDEncounter.relevantPeriod
```

Numerator Exclusions

```
None
```

Denominator Exceptions

```
None
```

Stratification

```
None
```

Definitions

Denominator

```
"Initial Population"
```

Initial Population

```
"Major Depressive Disorder Encounter" MDDEncounter
where "AgeInYearsAt"(date from start of "Measurement Period") >= 6
and "AgeInYearsAt"(date from start of "Measurement Period") <= 16
```

Major Depressive Disorder Encounter

```
( ["Encounter, Performed": "Office Visit"]
union ["Encounter, Performed": "Outpatient Consultation"]
union ["Encounter, Performed": "Psych Visit Diagnostic Evaluation"]
union ["Encounter, Performed": "Psych Visit for Family Psychotherapy"]
union ["Encounter, Performed": "Psych Visit Psychotherapy"]
union ["Encounter, Performed": "Psychoanalysis"]
union ["Encounter, Performed": "Group Psychotherapy"]
union ["Encounter, Performed": "Telephone Visits" ] ValidEncounter
where exists ( ValidEncounter.diagnoses EncounterDiagnosis
where EncounterDiagnosis.code in "Major Depressive Disorder Active"
)
and ValidEncounter.relevantPeriod during day of "Measurement Period"
```

Numerator

```
"Major Depressive Disorder Encounter" MDDEncounter
with ["Intervention, Performed": "Suicide risk assessment (procedure)"] SuicideRiskAssessment
such that Global."NormalzeInterval" ( SuicideRiskAssessment.relevantDatetime, SuicideRiskAssessment.relevantPeriod ) during MDDEncounter.relevantPeriod
```

SDE Ethnicity

```
["Patient Characteristic Ethnicity": "Ethnicity"]
```

SDE Payer

```
["Patient Characteristic Payer": "Payer Type"]
```

SDE Race

```
["Patient Characteristic Race": "Race"]
```

SDE Sex

```
["Patient Characteristic Sex": "ONC Administrative Sex"]
```

Functions

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

```
if pointInTime is not null then Interval(pointInTime, pointInTime)
else if period is not null then period
else null as Interval-DateTime>
```

Terminology

- code "Suicide risk assessment (procedure)" ("SNOMEDCT Code (225337009)")
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Group Psychotherapy" (2.16.840.1.113883.3.526.3.1187)
- valueset "Major Depressive Disorder Active" (2.16.840.1.113883.3.526.3.1491)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "ONC Administrative Sex" (2.16.840.1.113762.1.4.1)
- valueset "Outpatient Consultation" (2.16.840.1.113883.3.464.1003.101.12.1008)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Psych Visit Diagnostic Evaluation" (2.16.840.1.113883.3.526.3.1492)
- valueset "Psych Visit for Family Psychotherapy" (2.16.840.1.113883.3.526.3.1018)
- valueset "Psych Visit Psychotherapy" (2.16.840.1.113883.3.526.3.1496)
- valueset "Psychoanalysis" (2.16.840.1.113883.3.526.3.1141)
- valueset "Race" (2.16.840.1.114222.4.11.836)
- valueset "Telephone Visits" (2.16.840.1.113883.3.464.1003.101.12.1080)

Data Criteria (QDM Data Elements)

- "Encounter, Performed: Group Psychotherapy" using "Group Psychotherapy (2.16.840.1.113883.3.526.3.1187)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Outpatient Consultation" using "Outpatient Consultation (2.16.840.1.113883.3.464.1003.101.12.1008)"
- "Encounter, Performed: Psych Visit Diagnostic Evaluation" using "Psych Visit Diagnostic Evaluation (2.16.840.1.113883.3.526.3.1492)"
- "Encounter, Performed: Psych Visit for Family Psychotherapy" using "Psych Visit for Family Psychotherapy (2.16.840.1.113883.3.526.3.1018)"
- "Encounter, Performed: Psych Visit Psychotherapy" using "Psych Visit Psychotherapy (2.16.840.1.113883.3.526.3.1496)"
- "Encounter, Performed: Psychoanalysis" using "Psychoanalysis (2.16.840.1.113883.3.526.3.1141)"
- "Encounter, Performed: Telephone Visits" using "Telephone Visits (2.16.840.1.113883.3.464.1003.101.12.1080)"
- "Intervention, Performed: Suicide risk assessment (procedure)" using "Suicide risk assessment (procedure)" (SNOMEDCT Code 225337009)
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity" (2.16.840.1.114222.4.11.837)
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.113762.1.4.1)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: ONC Administrative Sex" using "ONC Administrative Sex (2.16.840.1.113762.1.4.1)"

Supplemental Data Elements

SDE Ethnicity

```
["Patient Characteristic Ethnicity": "Ethnicity"]
```

SDE Payer

```
["Patient Characteristic Payer": "Payer Type"]
```

SDE Race

```
["Patient Characteristic Race": "Race"]
```

SDE Sex

```
["Patient Characteristic Sex": "ONC Administrative Sex"]
```

Risk Adjustment Variables

```
None
```

Measure Set	None
-------------	------