The Aims and Measures section is intended to provide guideline users with a menu of measures for multiple purposes, which may include the following:

- Population health improvement measures
- Quality improvement measures for delivery systems
- Measures from regulatory organizations such as The Joint Commission
- Measures that are currently required for public reporting
- Measures that are part of Center for Medicare Services Physician Quality Reporting initiative
- Other measures from local and national organizations aimed at measuring population health and improvement of care delivery

This section provides resources, strategies and measurement for use in closing the gap between current clinical practice and the recommendations set forth in the guideline.

The subdivisions of this section are:

- Aims and Measures
- Implementation Recommendations
- Implementation Tools and Resources
Aims and Measures

The aims and measures in this guideline are based upon evidence supporting impact of system elements and process elements, and promoting actual symptom and functional patient improvement and outcomes, and are aligned with MN Community Measurement where there is overlap. The work group has elected to use PHQ-9 in the measures, since it is broadly utilized by various organizations. There are other evidence-based tools that may be used. If other tools are chosen for measurement, they should be sensitive, specific, reliable and valid for measuring intensity levels and response and remission rates.

1. Increase the percentage of patients accurately diagnosed with major depression or persistent depressive disorder. *(Annotation #2)*

   Measure for accomplishing this aim:
   
   a. Percentage of patients with a diagnosis of major depression or persistent depressive disorder with documentation of DSM-5 criteria at the time of the diagnosis.

2. Decrease the number of completed suicides in patients with major depression or persistent depressive disorder managed in primary care. *(Annotation #3a)*

   Measure for accomplishing this aim:
   
   a. Number of patients who commit suicide at any time while managed in primary care.

3. Increase the percentage of patients with major depression or persistent depressive disorder who are screened for substance use disorders. *(Annotation #4a)*

   Measure for accomplishing this aim:
   
   a. Percentage of patients who are screened for substance use disorders with an appropriate screening tool.

4. Increase the screening for major depression or persistent depressive disorder of primary care patients presenting with any additional high-risk conditions such as diabetes, cardiovascular disease, post-stroke, chronic pain and all perinatal women. *(Appendix D)*

   Measures for accomplishing this aim:
   
   a. Percentage of patients with type 2 diabetes with documentation of screening for major depression or persistent depressive disorder using PHQ-2 or PHQ-9.
   
   b. Percentage of patients with cardiovascular disease with documentation of screening for major depression or persistent depressive disorder using either PHQ-2 or PHQ-9.
   
   c. Percentage of patients who had a stroke with documentation of screening for major depression or persistent depressive disorder using either PHQ-2 or PHQ-9.
   
   d. Percentage of patients with chronic pain with documentation of screening for major depression or persistent depressive disorder using either PHQ-2 or PHQ-9.
   
   e. Percentage of perinatal patients with documentation of screening for major depression or persistent depressive disorder using either PHQ-2 or PHQ-9.
5. Improve communication between the primary care physician and the mental health care clinician (if patient is co-managed).  (Annotation #7a)

Measure for accomplishing this aim:

a. Percentage of patients with major depression or persistent depressive disorder whose primary care records show documentation of any communication between the primary care clinician and the mental health care clinician.

6. Increase the percentage of patients with major depression or persistent depressive disorder who have improvement in outcomes from treatment for major depression or persistent depressive disorder.  (Annotations #5, 6)

Measures for accomplishing this aim (the following are patient-reported outcomes):

a. Percentage of patients who have had a response to treatment at six months (+/- 30 days) after diagnosis or initiating treatment, e.g., had a PHQ-9 score decreased by 50% from initial score at six months (+/- 30 days).

b. Percentage of patients who have reached remission at six months (+/- 30 days) after diagnosis or initiating treatment, e.g., had any PHQ-9 score less than 5 at six months (+/- 30 days).

c. Percentage of patients who have had a response to treatment at 12 months (+/- 30 days) after diagnosis or initiating treatment, e.g., had a PHQ-9 score decreased by 50% from initial score at 12 months (+/- 30 days).

d. Percentage of patients who have reached remission at 12 months (+/- 30 days) after initiating treatment, e.g., had a PHQ-9 score less than 5 at 12 months (+/- 30 days).

7. Increase the percentage of patients with major depression or persistent depressive disorder who have follow-up to assess for outcomes from treatment.  (Annotations #5, 6, 7a)

Measures for accomplishing this aim:

a. Percentage of patients whose symptoms are reassessed by the use of a quantitative symptom assessment tool (PHQ-9) at six months (+/- 30 days) after diagnosis or initiating treatment.

b. Percentage of patients whose symptoms are reassessed by the use of a quantitative symptom assessment tool (such as PHQ-9) at 12 months (+/- 30 days) after diagnosis or initiating treatment.
Measurement Specifications

Measurement #1a

Percentage of patients with a diagnosis of major depression or persistent depressive disorder with documentation of DSM-5 criteria at the time of the diagnosis.

Population Definition

Patients age 18 years and older with a new primary care diagnosis of major depression or persistent depressive disorder, ICD 10 codes include F32.x, F33.x and F34.1.

Data of Interest

# of medical records containing documentation of DSM-5 criteria at the time of the initial diagnosis
# of medical records reviewed for patients newly diagnosed with major depression or persistent depressive disorder

Numerator/Denominator Definitions

Numerator: Number of records containing documentation of DSM-5 criteria documentation at the time of the initial diagnosis.

Denominator: Number of primary care patients age 18 years and older with new diagnosis of major depression or persistent depressive disorder during the measurement period and patient has not been treated for depression.

Note: Major depression and persistent depressive disorder ICD 10 codes include F32.x, F33.x and F34.1.

New diagnosis = patients diagnosed with major depression or persistent depressive disorder during the measurement period. Measurement period can be weekly, monthly, quarterly, annually or any other period that clinic determines needs to be for quality improvement.

Documentation of DSM-5 Criteria

Must have a total of five symptoms for at least two weeks. One of the symptoms must be depressed mood or loss of interest.

1. Depressed mood
2. Markedly diminished interest or pleasure in all or almost all activities
3. Significant (more than 5% body weight) weight loss or gain, or decrease or increase in appetite
4. Insomnia or hypersomnia
5. Psychomotor agitation or retardation
6. Fatigue or loss of energy
7. Feeling of worthlessness or inappropriate guilt
8. Diminished concentration, or indecisiveness
9. Recurrent thoughts of death or suicide
Method/Source of Data Collection
Query the electronic medical records for patients newly diagnosed with major depression diagnosis or persistent depressive disorder during the measurement period. Determine if DSM-5 criteria were used to diagnose major depression or persistent depressive disorder. The presence of narrative comments reflecting application of DSM-5 criteria in making the diagnosis is acceptable evidence for this measure.

Time Frame Pertaining to Data Collection
Monthly.

Notes
This is a process measure, and improvement is noted as an increase in the rate.
Measurement #2a
Number of patients who commit suicide at any time while managed in primary care.

Population Definition
Patients age 18 years and older with major depression or persistent depressive disorder, ICD 10 codes include F32.x, F33.x and F34.1.

Data of Interest
Number of patients under depression management in primary care who commit suicide at any time while managed in primary care.

Numerator and Denominator Definitions
Number of patients with major depression or persistent depressive disorder who are in active panel in primary care who commit suicide at any time while managed in primary care.

Method of Data Collection
Query electronic medical records or registry for patients diagnosed with depression or persistent depressive disorder and in active panel. Determine if any of those patients committed suicide while managed in primary care.

Time Frame Pertaining to Data Collection
Quarterly.

Notes
This is an outcome measure, and the goal is zero.
Measurement #3a

Percentage of patients who are screened for substance use disorders with an appropriate screening tool.

Population Definition

Patients age 18 years and older with a new diagnosis of major depression or persistent depressive disorder, ICD 10 codes include F32.x, F33.x, F34.1.

Data of Interest

\[
\frac{\text{# of patients who are screened for substance use disorders with an appropriate screening tool}}{\text{# of patients diagnosed with major depression or persistent depressive disorder}}
\]

Numerator/Denominator Definitions

Numerator: Number of patients who are screened for substance use disorders with an appropriate screening tool.

Denominator: Number of patients age 18 years and older who were newly diagnosed with major depression or persistent depressive disorder or had an existing diagnosis.

Method/Source of Data Collection:

Query electronic medical records for patients diagnosed with major depression or persistent depressive disorder diagnosis in the last 12 months from the measurement date. Determine from medical records if a patient was screened for substance use disorders with an appropriate screening tool.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.
Measurement #4a
Percentage of patients with type 2 diabetes with documentation of screening for major depression or persistent depressive disorder using either PHQ-2 or PHQ-9.

Population Definition
Patients age 18 years and older with a diagnosis of type 2 diabetes.

Data of Interest
\[
\frac{\text{# of patients who were screened for depression symptoms with PHQ-2 or PHQ-9}}{\text{# of patients with type 2 diabetes}}
\]

Numerator/Denominator Definitions
Numerator: Number of patients screened for depression symptoms with PHQ-2 or PHQ-9.
Denominator: Number of patients age 18 years and older with type 2 diabetes who had at least one contact with a clinician in primary care in the last 12 months from the measurement date. Diagnosis may be either new or existing.

Method/Source of Data Collection
Query electronic medical records to determine the number of patients with type 2 diabetes with at least one contact with a primary care clinician in the last 12 months from the measurement date. Determine if those patients were screened for depression symptoms with PHQ-2 or PHQ-9 at any of the contacts. Count only one screen.

Time Frame Pertaining to Data Collection
Quarterly.

Notes
This is a process measure, and improvement is noted as an increase in the rate.
Measurement #4b
   Percentage of patients with cardiovascular disease with documentation of screening for major depression or persistent depressive disorder using either PHQ-2 or PHQ-9.

Population Definition
   Patients age 18 years and older with a diagnosis of cardiovascular disease.

Data of Interest
   \[
   \frac{\text{# of patients who were screened for depression symptoms with PHQ-2 or PHQ-9}}{\text{# of patients with cardiovascular disease}}
   \]

Numerator/Denominator Definitions
   Numerator: Number of patients screened for depression symptoms with PHQ-2 or PHQ-9.
   Denominator: Number of patients age 18 years and older with cardiovascular disease who had at least one contact with a clinician in primary care in the last 12 months from the measurement date. Diagnosis may be either new or existing.

Method/Source of Data Collection:
   Query electronic medical records to determine the number of patients with cardiovascular disease with at least one contact with a primary care clinician in the last 12 months from the measurement date. Determine if those patients were screened with PHQ-2 or PHQ-9 for depression symptoms at any of the contacts. Count only one screen.

Time Frame Pertaining to Data Collection
   Quarterly.

Notes
   This is a process measure, and improvement is noted as an increase in the rate.
Measurement #4c
Percentage of patients who had a stroke with documentation of screening for major depression or persistent depressive disorder using either PHQ-2 or PHQ-9.

Population Definition
Patients age 18 years and older who had a stroke.

Data of Interest
\[
\frac{\text{# of patients who were screened for depression symptoms with PHQ-2 or PHQ-9}}{\text{# of patients who had a stroke}}
\]

Numerator/Denominator Definitions
Numerator: Number of patients screened for depression symptoms with PHQ-2 or PHQ-9.
Denominator: Number of patients age 18 years and older who had at least one contact with a clinician in primary care in the last 12 months from the measurement date. Diagnosis may be either new or existing.

Method/Source of Data Collection:
Query electronic medical records to determine the number of patients who had a stroke with at least one contact with a primary care clinician in the last 12 months from the measurement date. Determine if those patients were screened for depression symptoms with PHQ-2 or PHQ-9 at any of the contacts. Count only one screen.

Time Frame Pertaining to Data Collection
Quarterly.

Notes
This is a process measure, and improvement is noted as an increase in the rate.
Measurement #4d

Percentage of patients with chronic pain with documentation of screening for major depression or persistent depressive disorder using either PHQ-2 or PHQ-9.

Population Definition

Patients age 18 years and older with a diagnosis of chronic pain.

Data of Interest

\[
\frac{\text{# of patients who were screened for depression symptoms with PHQ-2 or PHQ-9}}{\text{# of patients with chronic pain}}
\]

Numerator/Denominator Definitions

Numerator: Number of patients screened for depression symptoms with PHQ-2 or PHQ-9.

Denominator: Number of patients age 18 years and older with chronic pain who had at least one contact with a clinician in primary care in the last 12 months from the measurement date. Diagnosis may be either new or existing.

Method/Source of Data Collection:

Query electronic medical records to determine the number of patients with chronic pain with at least one contact with a primary care clinician in the last 12 months from the measurement date. Determine if those patients were screened with PHQ-2 or PHQ-9 for depression symptoms at any of the contacts. Count only one screen.

Time Frame Pertaining to Data Collection

Quarterly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.
Measurement #4e
Percentage of perinatal patients with documentation of screening for major depression or persistent depressive disorder using either PHQ-2 or PHQ-9.

Population Definition
Patients age 18 years and older who are perinatal.

Data of Interest
\[
\frac{\text{# of patients who were screened for depression symptoms}}{\text{# of patients who are perinatal}}
\]

Numerator/Denominator Definitions
Numerator: Number of patients screened for depression symptoms with PHQ-2 or PHQ-9.
Denominator: Number of patients age 18 years and older who are perinatal who had at least one contact with a clinician in primary care in the last 12 months from the measurement date. Diagnosis may be either new or existing.

Method/Source of Data Collection:
Query electronic medical records to determine the number of patients who are perinatal with at least one contact with a primary care clinician in the last 12 months from the measurement date. Determine if those patients were screened with PHQ-2 or PHQ-9 for depression symptoms at any of the contacts. Count only one screen.

Time Frame Pertaining to Data Collection
Quarterly.

Notes
This is a process measure, and improvement is noted as an increase in the rate.
Measurement #5a

Percentage of patients with major depression or persistent depressive disorder whose primary care records show documentation of any communication between the primary care clinician and the mental health care clinician.

Population Definition

Patients age 18 years and older with a new or existing major depression diagnosis or persistent depressive disorder, ICD 10 codes include F32.x, F33.x and F34.1.

Data of Interest

\[
\frac{\text{# of patients with documentation of communication between clinicians}}{\text{# of patients with major depression or persistent depressive disorder}}
\]

Numerator/Denominator Definitions

Numerator: Number of patients with documentation of communication between primary care clinician and mental health clinician during the measurement period.

Denominator: Number of patients age 18 years with a new or existing diagnosis of major depression or persistent depressive disorder during the measurement period.

Method/Source of Data Collection:

Query electronic medical records to determine the number of patients with new or existing diagnoses of major depression or persistent depressive disorder during the measurement period. Determine if patients' records indicate any communication between primary care clinician and mental health clinician during the measurement period.

Time Frame Pertaining to Data Collection

Quarterly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.
Measurement #6a
Percentage of patients who have had a response to treatment at six months (+/- 30 days) after diagnosis or initiating treatment, e.g., had a PHQ-9 score decreased by 50% from initial score at six months (+/- 30 days).

Population Definition
Patients age 18 years and older with a diagnosis of major depression or persistent depressive disorder, ICD 10 codes include F32.x, F33.x and F34.1 and PHQ-9 > 9.

Data of Interest
# of patients whose PHQ-9 decreased by 50% at six months after diagnosis or initiating treatment (+/- 30 days)
_________________________________________________________
# of patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, six months earlier

Numerator/Denominator Definitions
Numerator: Number of patients whose PHQ-9 administered at six months (+/- 30 days) after diagnosis or initiating treatment decreased by 50% or more from initial PHQ-9 score administered.

Denominator: Number of patients age 18 years and older with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, six months earlier.

Diagnosis can be new or existing.

Method/Source of Data Collection:
Query electronic medical records for patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, six months from the measurement date. Determine if a patient had a follow-up contact at six months and PHQ-9 was done at six months, +/- 30 days. Determine if PHQ-9 decreased by 50% from the initial PHQ-9 done six months from the measurement date.

Time Frame Pertaining to Data Collection
Monthly.

Notes
This is a patient reported outcome measure, and improvement is noted as an increase in the rate. This measure is aligned with MN Community Measurement depression measure for public reporting.
Measurement #6b

Percentage of patients who have reached remission at six months (+/- 30 days) after diagnosis or initiating treatment, e.g., had any PHQ-9 score less than 5 at six months (+/- 30 days).

Population Definition

Patients age 18 years and older with diagnosis of major depression or persistent depressive disorder, ICD 10 codes include F32.x, F33.x and F34.1 and PHQ-9 > 9.

Data of Interest

\[
\frac{\text{# of patients with a PHQ-9 score < 5 at six months after diagnosis or initiating treatment (\/+ - 30 days)}}{\text{# of patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, six months earlier}}
\]

Numerator/Denominator Definitions

Numerator: Number of patients whose PHQ-9 score was less than 5 at six months (+/- 30 days) after diagnosis or initiating treatment.

Denominator: Number of patients age 18 years and older with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, six months from the measurement date.

Diagnosis can be new or existing.

Method/Source of Data Collection:

Query electronic medical records for patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, six months from the measurement date. Determine if the patient had a follow-up contact at six months, PHQ-9 was done at six months, +/- 30 days. Determine if PHQ-9 done < 5 at six months, +/- 30 days.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a patient-reported outcome measure, and improvement is noted as an increase in the rate. This measure is aligned with MN Community Measurement depression measure for public reporting.
Measurement #6c

Percentage of patients who have had a response to treatment at 12 months (+/- 30 days) after diagnosis or initiating treatment, e.g., had a PHQ-9 score decreased by 50% from initial score at 12 months (+/- 30 days).

Population Definition

Patients age 18 years and older with diagnosis of major depression or persistent depressive disorder, ICD 10 codes include F32.x, F33.x and F34.1 and PHQ-9 > 9.

Data of Interest

| # of patients whose PHQ-9 decreased by 50% at 12 months after diagnosis or initiating treatment (+/- 30 days) |
| # of patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9 12 months earlier |

Numerator/Denominator Definitions

Numerator: Number of patients whose PHQ-9 administered 12 months (+/- 30 days) after diagnosis or initiating treatment decreased by 50% or more from initial PHQ-9 score administered.

Denominator: Number of patients age 18 years and older diagnosis and PHQ-9 > 9, with major depression or persistent depressive disorder 12 months earlier.

Diagnosis can be new or existing.

Method/Source of Data Collection:

Query electronic medical records for patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, 12 months from the measurement date. Determine if a patient had a follow-up contact at 12 months and PHQ-9 was done at 12 months (+/- 30 days). Determine if PHQ-9 done at 12 months decreased by 50% from the initial PHQ-9 done 12 months from the measurement date.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a patient-reported outcome measure, and improvement is noted as an increase in the rate. This measure is aligned with MN Community Measurement depression measure for public reporting.
Measurement #6d

Percentage of patients who reached remission at 12 months (± 30 days) after diagnosis or initiating treatment, e.g., had a PHQ-9 score less than 5 at 12 months (± 30 days).

Population Definition

Patients age 18 years and older with diagnosis of major depression or persistent depressive disorder, ICD 10 codes include F32.x, F33.x and F34.1 and PHQ-9 > 9.

Data of Interest

\[
\frac{\text{# of patients with PHQ-9 < 5 at 12 months (± 30 days)}}{\text{# of patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, 12 months earlier}}
\]

Numerator/Denominator Definitions

Numerator: Number of patients whose PHQ-9 < 5 at 12 months (± 30 days) after diagnosis or initiating treatment.

Denominator: Number of patients age 18 years and older with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, 12 months from the measurement date.

Diagnosis can be new or existing.

Method/Source of Data Collection:

Query electronic medical records for patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, 12 months from the measurement date. Determine if a patient had a follow-up contact at 12 months from the diagnosis and PHQ-9 was done at 12 months (± 30 days). Determine if PHQ-9 < 5 at 12 months ± 30 days.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a patient-reported outcome measure, and improvement is noted as an increase in the rate. This measure is aligned with MN Community Measurement depression measure for public reporting.
Measurement #7a

Percentage of patients whose symptoms are reassessed by the use of a quantitative symptom assessment tool (PHQ-9) at six months (+/- 30 days) after diagnosis or initiating treatment.

Population Definition

Patients age 18 years and older with diagnosis of major depression or persistent depressive disorder, ICD 10 codes include F32.x, F33.x and F34.1 and PHQ-9 > 9.

Data of Interest

# of patients whose symptoms are reassessed with PHQ-9 at six months of diagnosis or initiating treatment

# of patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9

Numerator/Denominator Definitions

Numerator: Number of patients whose symptoms are reassessed with PHQ-9 at six months (+/- 30 days) after diagnosis or initiating treatment.

Denominator: Number of primary care patients age 18 years and older with new diagnosis of major depression or persistent depressive disorder and PHQ-9 > 9.

Diagnosis can be new or existing.

Method/Source of Data Collection:

Query electronic medical records for patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9, six months from the measurement date. Determine from medical records if a patient had a PHQ-9 done at follow-up contact at six months, +/- 30 days.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.
Measurement #7d

Percentage of patients whose symptoms are reassessed by the use of a quantitative symptom assessment tool (such as PHQ-9) at 12 months (+/- 30 days) after diagnosis or initiating treatment.

Population Definition

Patients age 18 years and older with diagnosis of major depression or persistent depressive disorder, ICD 10 codes include F32.x, F33.x, and F34.1 and PHQ-9 > 9.

Data of Interest

\[
\text{# of patients whose symptoms are reassessed with PHQ-9 at 12 months after diagnosis or initiating treatment} \\
\text{# of patients with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9}
\]

Numerator/Denominator Definitions

Numerator: Number of patients whose symptoms are reassessed with PHQ-9 at 12 months, +/- 30 days after diagnosis or initiating treatment.

Denominator: Number of primary care patients age 18 years and older with major depression or persistent depressive disorder diagnosis and PHQ-9 > 9. Diagnosis can be new or existing.

Method/Source of Data Collection:

Query electronic medical records for patients with major depression or persistent depressive disorder, diagnosis and PHQ-9 > 9, 12 months from the measurement date. Determine from medical records if a patient had a PHQ-9 done at follow-up contact at 12 months, +/- 30 days.

Time Frame Pertaining to Data Collection

Monthly.

Notes

This is a process measure, and improvement is noted as an increase in the rate.