Measure: Behavioral Health Risk Assessment for Pregnant Women

Measure Developer: Pediatric Measurement Center of Excellence (PMCoE)

<table>
<thead>
<tr>
<th>Numerator</th>
<th>Denominator</th>
<th>Exclusions</th>
<th>Data Source(s)</th>
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<tbody>
<tr>
<td>Patients who received all behavioral health screening risk assessments at the first prenatal visit: depression, alcohol use, tobacco use, drug use, and intimate partner violence.</td>
<td>All patients, regardless of age, who gave birth during a 12-month period seen at least once for prenatal care.</td>
<td>None.</td>
<td>Electronic medical record.</td>
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Measure Importance

- Between 14 and 23 percent of pregnant women will experience depression symptoms during pregnancy and an estimated 5 to 25 percent of women will have postpartum depression. Studies have shown that untreated maternal depression negatively affects an infant’s cognitive, neurologic, and motor skill development. During pregnancy, depression can lead to preeclampsia, preterm delivery, and low birth weight.

- Substance use during pregnancy can lead to birth-related, short-term adverse effects, and long-term developmental problems in the child.

- Women abused during pregnancy are more likely to be depressed, suicidal, and experience pregnancy complications and poor outcomes, including maternal and fetal death.
Evidence Base for the Focus of the Measure

- The United States Preventive Services Task Force (USPSTF) recommends:
  - Tobacco screening (“A” level recommendation; there is high certainty that the net benefit is substantial)
  - Screening and behavioral counseling interventions to reduce misuse of alcohol (“B” level recommendation; there is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial)
  - Screening of women of childbearing age for intimate partner violence and either provision of intervention services or referral to such services (“B” level recommendation; there is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial)

Advantages of the Measure

- This measure is specified for use in electronic health records (EHRs).
- The EHR specifications follow the standards in the Quality Data Model (QDM), developed by the National Quality Forum and the vocabulary recommendations named by the Health IT Standards Committee (of the Office of the National Coordinator for Health IT). The vocabulary standards used in the specifications are a part of Stage II of the CMS EHR incentive program (meaningful use).

Levels of Aggregation Applicable to the Measure

The measures are intended for aggregation and comparison at the State, regional, health plan, payment model type, hospital, individual clinician, and provider group levels.

Reliability and Validity of the Measure

- Measure reliability, as assessed using a beta-binomial model of signal to noise ratio, was 0.0.
- The face validity of the measure was assessed using expert and public opinion.

Measure Testing

- This measure’s reliability was tested using 2010 data from the EHR system of an urban, tertiary-care-level hospital. The measure was calculated for 57 physicians who had a minimum of 10 deliveries in that year.
- Measure feasibility was tested in that same location.

Selected Results from Tests of the Measure

All five screening components must be performed to meet the measure. Based on the sample of 57 physicians, the mean performance rate is 0.0. The range of the performance rate is 0.095 (0.0 – 0.095). The vast majority of physicians either did not record or perform all screening components of the measure. The performance rate indicates there are opportunities for quality improvement.
Caveats

- The test site did not report that the measure was feasible because of uncertainty about whether the data is captured reliably in the outpatient record. The site indicated that making the measure feasible would require a change in outpatient documentation.

- Missing data or ambiguous information stored in a provider’s EHR could lead to calculation errors and low performance on the measure.

- Use of this measure is limited to sites with EHRs.

More Information

- AHRQ: CHIPRAnqualitymeasures@ahrq.hhs.gov
- PMCOE: Lisa Ciesielczyk, lciesielczyk@aap.org and Ramesh Sachdeva, rsachdeva@aap.org
- Coming soon: Link to measure details on the AHRQ Web site.

For more information about the PQMP, visit www.ahrq.gov/CHIPRA

Notes

1An evidence base comprises the breadth and rigor of studies demonstrating valid relationship(s) among the structure, process, and/or outcome of health care that is the focus of the measure. For example, evidence exists for the relationship between immunizing a child or adolescent (process of care) and improved outcomes for the child and the public. If sufficient evidence existed for the use of immunization registries in practice or at the State level and the provision of immunizations to children and adolescents, such evidence would support the focus of a measure on immunization registries (a structural measure).

2The Children’s Health Insurance Program Reauthorization Act required measures developed under this program to “permit comparison of quality and data at a State, plan, and provider level.” The measure developer identified the intended levels of aggregation and comparison as reported here.

3The expert panel that reviewed the measure consisted of 24 members, with representation from measure methodologists, patient advocacy groups, and the following clinical specialties: anesthesiology, family practice, geriatric medicine, maternal fetal medicine, neonatology, nurse midwife, obstetrics and gynecology, and perinatal nursing. Eleven of 13 expert panel members that responded to a survey on validity agreed or strongly agreed that the scores obtained from the measure as specified will accurately differentiate quality across providers. A panel of consumer, purchaser, and patient representatives also reviewed the measure, and the measure developers received input from a 30-day public comment period.