Quality ID #QMM18: Use of Breast Cancer Risk Score on Mammography
- National Quality Strategy Domain: Communication and Care Coordination
- Meaningful Measure Area: Patient-Focused Episode of Care

**2021 COLLECTION TYPE:**
MIPS CLINICAL QUALITY MEASURES (CQMS)

**MEASURE TYPE:**
Process

**DESCRIPTION:**
The percentage of final reports for screening mammograms which include the patient’s estimated numeric risk assessment based on a validated and published model**, and appropriate recommendations for supplemental screening based on the patient’s estimated risk, and documentation of the source of recommendation.

** Must be a one of the models listed in the numerator instructions below.

**INSTRUCTIONS:**
This measure is to be submitted each time a screening mammogram is performed for all patients during the performance period. There is no diagnosis associated with this measure.

**Measure Submission Type:**
Measure data may be submitted by individual MIPS eligible clinicians, groups, or third-party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third-party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third-party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.
**DENOMINATOR:**
All final screening mammogram reports.

**Denominator Criteria (Eligible Cases):**
All Patients, regardless of age
AND
Patient procedure during the performance period (CPT or HCPC): 77067
AND
Screening mammogram for malignant neoplasm of breast (ICD-10-CM): Z12.31
AND NOT
**DENOMINATOR EXCLUSIONS:**
DE018: Patients with an active diagnosis of breast cancer, or history of breast cancer
OR
DE018: Screening mammogram assigned a BIRADS 0: Incomplete
OR
DE018: Women who have a history of mastectomy

**NUMERATOR:**
Final reports that include a documented calculated risk assessment number based on one of the validated and published models from the list below AND appropriate recommendation(s) for supplemental screening based on the patient’s estimated risk AND source of recommendation (Tyrer-Cuzick, Modified Gail, etc).

**Numerator Instructions**
- **Validated and Published Models** – All eligible exams should include an estimated risk number based on one of the validated and published models for breast cancer risk estimation listed below:
  o Modified Gail, or
  o BRCAPRO, or
  o Tyrer-Cuzick (IBIS Tool), or
  o Breast Cancer Surveillance Consortium (BCSC), or
  o National Cancer Institute’s Breast Cancer Risk Assessment Tool, or
  o Claus model

Use of a risk model, not on the list above, will be considered inappropriate for this measure.
- **Appropriate Recommendations** – Recommendations should be appropriately based on the patient’s estimated risk number for breast cancer. For example, for patients who are estimated to be high-risk, appropriate recommendation could include, but is not limited to, supplemental screening exams such as screening breast MRI.
**Numerator Options:**

**Performance Met:**

PM018: Final report includes a documented calculated risk assessment number based on one of the validated and published models listed in the numerator instructions AND appropriate recommendations for supplemental screening based on the patient’s estimated risk AND source of recommendation.

**Performance Not Met:**

PNM18: Final report does not include a documented calculated risk assessment number based on a validated and published model, AND/OR if patient is at risk, appropriate recommendations for supplemental screening based on the patient’s estimated risk not documented AND source of recommendation, reason not given.

**Denominator Exception (if applicable):**

PDE18: Documentation of medical reason(s) for not documenting calculated risk assessment, such as patients with a limited life expectancy, other medical reason(s)

**MEASURE TESTING AND GAP ANALYSIS:**

200 reports were reviewed to assess the rate of recorded risk assessments and documentation of appropriate follow-up. Of the sample reviewed, a recorded calculated risk assessment was documented in 25 records (12.5% of 200 total records). Follow-up recommendations were documented in 5 out of the documented 25 records (2.5% of 200 total records).

**RATIONALE:**

Screening is of greatest value for patients who are most likely to develop breast cancer and for whom early treatment is more effective than later treatment in reducing mortality. Thus, it is important to determine a patient’s risk of developing breast cancer and use that information both to recommend the modality and frequency of screening and also to determine whether referrals are needed for genetic testing and for consideration of chemoprevention and/or prophylactic surgery. (Elmore)

Contrast-enhanced breast MRI (ie, breast MRI, with and without gadolinium-based contrast; hereafter MRI) is known to increase cancer detection in higher-risk women and is more sensitive than either mammography or ultrasound in high-risk populations. Recommendations have been established supporting the use of MRI in women with genetics-based increased risk and their untested first-degree relatives, women who received chest radiation therapy before age 30, and women with a calculated risk of 20% or more. Data continue to accumulate to support these recommendations, as well as some refinements to them. (Mon)
**CLINICAL RECOMMENDATION STATEMENTS:**

**American Cancer Society:**
American Cancer Society screening recommendations for women at high risk
Women who are at high risk for breast cancer based on certain factors should get a breast MRI and a mammogram every year, typically starting at age 30. This includes women who: Have a lifetime risk of breast cancer of about 20% to 25% or greater, according to risk assessment tools that are based mainly on family history.
If MRI is used, it should be in addition to, not instead of, a screening mammogram. This is because although an MRI is more likely to detect cancer than a mammogram, it may still miss some cancers that a mammogram would detect. Most women at high risk should begin screening with MRI and mammograms when they are 30 and continue for as long as they are in good health. (American Cancer Society)

**American Society of Breast Surgeons:**
The ASBrS recommends annual MRI screening in the following patients, compliant with NCCN Guidelines: Women with a 20%-25% or greater estimated lifetime risk of breast cancer primarily based on mathematical models that are mostly based on family history such as the Claus, BRCAPRO, BOADICEA, and Tyrer-Cuzick models. (htt)

**American College of Radiology and Society of Breast Imaging:**
For women with genetics-based increased risk (and their untested first-degree relatives), history of chest radiation (cumulative dose of 10 Gy before age 30), or with a calculated lifetime risk of 20% or more, breast MRI should be performed annually beginning at age 25 to 30. (Breast Cancer Screening in Women at Higher-Than-Average Risk)

**References:**
Meaningful Measure Priority: Patient-Focused Episode of Care
NQS Domain: Communication & Care Coordination
Measure type: Process
Data Source: Administrative claims; patient medical records.
Measure Steward: MEDNAX Services, Inc. and MSN Healthcare Solutions
Number of Multiple Performance Rates: One performance rate
Inverse Measure: No
Proportion Measure Scoring: Yes
Continuous Measure Scoring: No
Risk adjustment: No
NQF Number: Not applicable
eCQM Number: Not applicable
High Priority Measure: Yes
High Priority Type: Care Coordination
Care Setting: Ambulatory Hospital, Hospital Inpatient, Outpatient Services, ED Services
Includes Telehealth: No
Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

**Sample Calculations:**

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\text{Data Completeness} = \frac{\text{Performance Met (p=40 procedures) } + \text{ Numerator Exclusion (b=20 procedures) } + \text{ Performance Not Met (b=60 procedure)}}{\text{Eligible Population / Denominator (c=100 procedures)}} = \frac{100}{100} = 100.00\%
\]

\[
\text{Performance Rate} = \frac{\text{Performance Met (p=40 procedures)}}{\text{Data Completeness Numerator (100 procedures) } - \text{ Numerator Exclusion (20 procedures)}} = \frac{40}{80} = 50.00\%
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2021 Clinical Quality Measure Flow for Quality ID #QMM18: Use of Breast Cancer Risk Score on Mammography

Please refer to the specific section of the specification to identify the denominator and numerator information for use in submitting this Individual Specification.

1. Start with Denominator
2. Check Procedure Performed
   a. If Procedure Code: 77067 equals NO, do not include in Eligible Population. Stop Processing.
   b. If Procedure Code: 77067 equals YES, proceed to check Diagnosis Code
3. Check Diagnosis Code
   a. If Diagnosis Code: Z12.31 equals NO, do not include in Eligible Population. Stop Processing.
   b. If Diagnosis Code: Z12.31 equals YES, proceed to check Patient has an active diagnosis of Breast Cancer or history of Breast Cancer
4. Check Patient has an active diagnosis of Breast Cancer or history of Breast Cancer
   a. If Patient has an active diagnosis of Breast Cancer or history of Breast Cancer equals YES, do not include in Eligible Population. Stop Processing.
   b. If Patient has an active diagnosis of Breast Cancer or history of Breast Cancer equals NO, proceed to Screening Mammogram assigned a BIRADS 0: Incomplete.
5. Check Screening Mammogram assigned a BIRADS 0: Incomplete
   a. If Screening Mammogram assigned a BIRADS 0: Incomplete equals YES, do not include in Eligible Population. Stop Processing.
   b. If Screening Mammogram assigned a BIRADS 0: Incomplete equals NO, check If Women who have a history of mastectomy.
6. Check If Women who have a history of mastectomy.
   a. If If Women who have a history of mastectomy equals YES, do not include in Eligible Population. Stop Processing.
   b. If Women who have a history of mastectomy equals NO, include in Eligible Population.
7. Denominator Population:
   a. Denominator Population is all Eligible Procedures in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter “c” equals 100 procedures in the Sample Calculation.
8. Start Numerator
9. Check Final report includes documented risk score using a validated and published model (acceptable models are listed in numerator instructions above) & appropriate recommendation based on the risk score
   a. If Final report includes documented risk score using validated and published model(s) & appropriate recommendation based on the risk score equals YES, include in Data Completeness Met and Performance Met.
b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter “a” equals 40 procedures in the Sample Calculation.

c. If Final report includes documented risk score using published models & appropriate recommendation based on the risk score equals NO, check Documentation of medical reason(s) for not documenting calculated risk assessment.

10. Check Documentation of medical reason(s) for not documenting calculated risk assessment
   a. If Documentation of medical reason(s) for not documenting calculated risk assessment equals YES, include in Data Completeness Met and Numerator Exclusion.
   b. Data Completeness Met and Numerator Exclusion letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter “b” equals 20 procedures in the Sample Calculation
   c. If Documentation of medical reason(s) for not documenting calculated risk assessment equals NO, check Final report does not include documented risk score and recommendation based on the risk score, reason not given.

11. Check Final report does not include documented risk score and recommendation based on the risk score, reason not given.
   a. If Final report does not include documented risk score and recommendation based on the risk score, reason not given equals YES, include in Data Completeness Met and Performance Not Met.
   b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter “b” equals 40 procedures in the Sample Calculation.
   c. IF Final report does not include documented risk score and recommendation based on the risk score, reason not given equals NO, Proceed to Data Completeness Not Met.

12. Check Data Completeness Not Met:
   a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 0 procedures have been subtracted from the Data Completeness Numerator in the Sample Calculation