Background:
Breast cancer is the most common female cancer in the United States for every major ethnic group, the second most common cause of cancer death in women, and accounts for 15 percent of all new cancer diagnoses in the U.S. Ensuring that all women receive regular breast cancer screening is critically important in disease prevention, early detection, and treatment. In 2019, an estimated 268,600 new cases of invasive breast cancer will be diagnosed among women. Breast cancer screening for women is aimed at identifying breast abnormalities as early as possible, and ideally, before warning signs or symptoms are present when the chances of survival are the highest. Approximately 1 in 8 women (13 percent) will be diagnosed with invasive breast cancer in their lifetime and 1 in 39 women (3 percent) will die from breast cancer.

Breast cancer is most frequently diagnosed among women ages 55-64 with the median age of diagnosis at 62 years of age. While there are other factors that affect a woman's risk of developing breast cancer, age is a primary risk factor. By age 40, the chances are 1 in 68; by age 50 it becomes 1 in 43; by age 60, it is 1 in 29. Even if breast cancer incidences cannot be substantially reduced for some women who are at high risk for developing the disease, the risk of death from breast cancer can be reduced by regular screening.

Cervical cancer is a type of cancer that occurs in the cells of the cervix. All women are at risk for cervical cancer; however, it occurs most often in women over age 30. According to the American Cancer Society, in the United States for 2020 about 13,800 new cases of invasive cervical cancer will be diagnosed and about 4,290 women will die from the disease. The risk of developing cervical cancer can be reduced by having screening tests and receiving a vaccine that protects against human papillomavirus (HPV) infection. Women who smoke, had many children, used birth control pills for a long time, or have a human immunodeficiency virus (HIV) infection are at higher risk. Cervical cancer used to be the leading cause of cancer death for women in the United States. However, in the past 40 years, the number of cases and the number of deaths from cervical cancer have decreased significantly due to women getting screened regularly. The HPV vaccine protects against the types of HPV that most often cause cervical, vaginal, and vulvar cancers. However, the most important thing someone can do to help prevent cervical cancer is to have regular screenings starting at the age of 21.
Between 30-50 percent of all cancer cases are preventable. Breast and cervical cancer screenings increase the chances of detecting certain cancers early, when they might be easier to treat. Prevention offers the most cost effective long-term strategy for the control of cancer. Policies, programs, and projects should be implemented to raise awareness, to reduce exposure to cancer risk factors, and to ensure that individuals are provided with the information and support needed to participate in preventive screenings.

**Purpose:**
The purpose of this performance improvement project is to increase the number and percent of 1) breast cancer screenings and 2) cervical cancer screenings.

**AHCCCS Goal:**
The goal is to demonstrate a statistically significant increase in the number and percentage of 1) breast cancer screenings and 2) cervical cancer screenings, followed by sustained improvement for one consecutive year.

**Measurement Period:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Baseline Measurement</td>
<td>October 1, 2018 through September 30, 2019</td>
</tr>
<tr>
<td>Intervention Year 1</td>
<td>January 1, 2020 through December 31, 2020</td>
</tr>
<tr>
<td>Intervention Year 2</td>
<td>January 1, 2021 through December 31, 2021</td>
</tr>
<tr>
<td>First Re-measurement</td>
<td>January 1, 2022 through December 31, 2022</td>
</tr>
<tr>
<td>Second Re-measurement</td>
<td>January 1, 2023 through December 31, 2023</td>
</tr>
</tbody>
</table>

**Study Question:**
What is the number and percent, overall and by Contractor, of enrolled women receiving 1) breast cancer screenings and 2) cervical cancer screenings?

**Eligible Population:**

**Breast Cancer Screenings**
- Women, 50 to 74 years of age, who are continuously enrolled with no more than one gap in enrollment of up to 45 days during the measurement period

**Cervical Cancer Screenings**
- Women, 21 to 64 years of age, who are continuously enrolled with no more than one gap in enrollment of up to 45 days during the measurement period

**Population Exclusions:**

**Breast Cancer Screenings**
- Women, 50 to 74 years of age, who do not meet the continuous enrollment criteria as described in the indicator’s associated technical specifications
- Women, 50 to 74 years of age, with more than one gap in enrollment during the measurement period
- Women, 50 to 74 years of age, with a gap in enrollment of more than 45 days during the measurement period
- Women, 50 to 74 years of age, meeting exclusion criteria (required and optional) as outlined in the indicator’s associated technical specifications

**Cervical Cancer Screenings**
- Women, 21 to 64 years of age, who do not meet the continuous enrollment criteria as described in the indicator’s associated technical specifications
- Women, 21 to 64 years of age, with more than one gap in enrollment during the measurement period
- Women, 21 to 64 years of age, with a gap in enrollment of more than 45 days during the measurement period
- Women, 21 to 64 years of age, meeting exclusion criteria (required and optional) as outlined in the indicator’s associated technical specifications

**Population Stratification:**
*Not applicable*

**Sample Frame:**
All members that meet the eligibility criteria at the Contractor-specific level will be evaluated to determine the indicator rate(s).

**Sample Selection:**
*Not applicable*

**Indicator Criteria:**

**Indicator 1: Breast Cancer Screening**

<table>
<thead>
<tr>
<th>Indicator 1: The percentage of women 50–74 years of age who had a mammogram to screen for breast cancer.</th>
<th>Numerator: Number of women who had one or more mammograms any time on or between October 1 two years prior to the measurement year and December 31 of the measurement year.*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Denominator:</strong> The eligible population.</td>
<td></td>
</tr>
</tbody>
</table>

*One or more mammograms any time on or between July 1 two years prior to the measurement year and September 31 of the measurement year for CYE 2019 Measurement Year only*

**Indicator 2: Cervical Cancer Screening**

<table>
<thead>
<tr>
<th>Indicator 1: The percentage of women 21–64 years of age who were screened for cervical cancer using either of the following criteria:</th>
<th>Numerator: Number of women who were screened for cervical cancer as outlined in the associated technical specifications.*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Denominator:</strong> The eligible population.</td>
<td></td>
</tr>
</tbody>
</table>
• Women ages 21 to 64 who had cervical cytology performed within the last 3 years
• Women ages 30 to 64 who had cervical high-risk human papillomavirus (hrHPV) testing performed within the last 5 years
• Women ages 30 to 64 who had cervical cytology/high-risk human papillomavirus (hrHPV) cotesting within the last 5 years

*Cervical cytology performed any time on or between October 1 three years prior to the measurement year and September 31 of the measurement year or hrHPV testing/cervical cytology and hrHPV cotesting any time on or between October 1 five years prior to the measurement year and September 31 of the measurement year for CYE 2019 measurement year only

Data Sources:
AHCCCS administrative encounter data and Contractor-specific claims data will be used to identify indicator data.

Data Collection:
The study will be conducted via administrative data collection methodologies in alignment with the National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS®) technical specifications.

Confidentiality Plan:
AHCCCS, as well as its External Quality Review Organization (EQRO) and Contractors maintain compliance with the Health Insurance Portability and Accountability Act (HIPAA) requirements. AHCCCS employees and EQRO staff who analyze data for this project will have access to study data. Member names are never identified or used in AHCCCS reporting; requested data are used only for the purpose of performing health care operations, oversight of the health care system, or research.

Quality Assurance Measures:
For indicators based on standardized performance measures, Contractor-specific claims data and performance measure (indicator) calculations will be reviewed and validated by the EQRO in alignment with CMS Protocol 2.

Note: For CYE 2019, AHCCCS encounter data utilized for performance measure calculations will be thoroughly reviewed and validated by the EQRO to ensure calculations are accurate and complete.

Data Validation:
The data validation study compares allowable claims sent to the Contractors by rendering health care providers/facilities. Contractor-calculated performance measure (indicator) results will be validated by the EQRO in alignment with CMS Protocol 2.
Note: For CYE 2019, the data validation study compares allowable encounters sent to AHCCCS by the Contractors with performance measure (indicator) calculation and detailed validation conducted by the EQRO to ensure performance measure (indicators) calculations are accurate and complete.

Analysis Plan:
The study data will be analyzed in the following ways:
- The numerator will be divided by the denominator to determine the indicator rates.
- Results will be analyzed by line of business (roll-up) and individual Contractor.

Comparative Analysis:
For the purpose of comparative analyses, the following will be considered when applicable and meaningful to future improvement:
- Results will be compared with prior years to identify changes and trends.
- Individual Contractor results will be compared with each other, the statewide aggregate, and the NCQA Medicaid Mean.
- Results may be compared to the results of any other comparable studies, if available.
- In the future, differences between overall baseline study results and overall re-measurement results will be analyzed for statistical significance and relative change.

Limitations:
As of CYE 2020, AHCCCS has transitioned to Contractor-calculated performance measure rates reflective of calendar year measurement periods for the purposes of evaluating Contractor performance to support Managed Care Organization (MCO) oversight and External Quality Review (EQR) Annual Reporting. Analysis will be conducted in accordance with that outlined in the Analysis Plan and Comparative Analysis sections above, with additional individual Contractor analysis findings included within the EQR Annual Report for the associated line of business.

Additional Considerations:
To account for the impact of the COVID-19 Public Health Emergency, this Performance Improvement Project is inclusive of two intervention years.

Performance Measures calculations and reporting are conducted in alignment with associated technical specifications; as such, changes in specifications from year to year may occur and shall be considered/notated when evaluating and trending performance over the lifespan of the Performance Improvement Project.
Works Cited


For general questions regarding this methodology, please contact Jamie Robin, AHCCCS Quality Improvement Manager, at jamie.robin@azahcccs.gov. For technical questions regarding this methodology, please contact Lindsey Irelan, AHCCCS Quality Improvement Lead Coordinator, at lindsey.irelan@azahcccs.gov.