Our institutional study demonstrates that patients understand the importance of annual screening mammography yet exam scheduling still remains a barrier. We surveyed possible logistical and educational barriers for patients to obtain a mammogram. While several hundred patients were invited to the survey, a total of 70 patients answered the survey. The racial and ethnic demographics of the surveyed patients was 45% Black, 49% white, 4% Hispanic/Latina, 1% Asian-American, 1% multirace/other. The objectives of this study were:

- To query possible logistical and educational barriers for patients to obtaining a mammogram.
- Assess whether primary care providers are educating patients on the importance of mammography and ordering screening mammography exams.

The second leading cause of cancer death for women in the United States is breast cancer (Miller SSM 2019). The United States implemented a national breast cancer screening program in 1991 after Congress passed the Breast and Cervical Cancer Prevention Act in 1990. The purpose of the act was to provide timely high quality breast and cervical cancer screening to low income and underserved women (Lee Cancer 2014). A 30 year Swedish study demonstrated that screening mammography lowers mortality from breast cancer by 30% (Tabar Radiology 2011). Disparities exist in breast cancer mortality when analyzed by race due to multifactorial reasons; for example, Black women are 42% more likely to die from breast cancer than white women (Howlader 2017). A meta-analysis of 5.8 million patients demonstrated that Black and Hispanic patients had lower odds of utilizing screening mammography than other racial and ethnic populations in the United States (Ahmed JACR 2017).

Material and Methods

To survey possible barriers patients experience in getting a mammogram, institutional quality researchers utilized electronic clinical quality measures (eCQMs), a set of tools established by the Centers for Medicare and Medicaid Services (CMS) to help measure and track the quality of health care services that eligible hospitals and critical access hospitals provide as generated by a provider’s electronic health record. Inclusion criteria were women 50 and older due for annual screening mammography who had not already been screened in 2021. Only institutional primary care clinic patients were included. Patients evaluated in the emergency room and may not follow-up with our institution’s primary care clinic were excluded. A total of 200 patients who met the above inclusion criteria were invited to participate in a telephone survey. The patient’s responses were documented, archived and analyzed using SurveyMonkey.

Responding patients’ demographics were obtained. To assess each patient’s understanding of screening mammography, patient’s were asked a series of questions detailed in the results section. Each survey respondent was patient was also asked a series of questions to assess if there were any barriers to obtaining a mammogram and if so, what the barrier is. The survey results were further analyzed to determine what the most common barriers to screening mammography were.

Results

Survey respondents.

- Survey respondents were patient was 50 and older due for annual screening mammography who had not already been screened in 2021.
- Only institutional primary care clinic patients were included.
- Patients evaluated in the emergency room and may not follow-up with our institution’s primary care clinic were excluded.
- A total of 200 patients who met the above inclusion criteria were invited to participate in a telephone survey.
- The patient’s responses were documented, archived and analyzed using SurveyMonkey.

Assessing patient’s understanding of screening mammography importance.

- Understood the importance of the exam: 83%
- Understood that absence of a family history meant they were still at risk for developing breast cancer: 73%
- Understood that they needed a mammogram even if they hadn’t been diagnosed: 71%
- Thought that getting a mammogram would reduce their risk of dying from breast cancer: 73%

Discussion & Conclusion

Our institutional study demonstrates that patients understand the importance and need for an annual screening mammogram but scheduling the exam remains the most frequent barrier with 21% to 30% of patients in this study acknowledging not scheduling their annual mammogram. Discomfort from the exam (23%) and lack of transportation (14%) were the second and third most common barriers to screening mammography respectively.

This study is limited by a small sample size attributable to a low survey response (35%). Another factor affecting the sample size is the electronic clinical quality measures (eCQMs) that utilizes the United States Preventive Services Task Force’s (USPSTF) screening mammography guidelines which recommends biennial screening mammography for women aged 50 to 74 years. These clinical quality measures exclude patient’s aged 40 to 49 years who per the American College of Radiology (ACR) guidelines, qualify for screening mammography, which further decreased our sample size. There is a discrepancy between the number of Hispanic/Latin X patients served by our institution and the number of our survey respondents which is attributable to the lack of an interpreter during the survey. Our study also did not address the disability status of the survey participants.

Future efforts to improve screening mammography in the underrepresented patient population at our institution will focus on scheduling i.e. automated patient reminders, self-scheduling, patient outreach focusing on perceived discomfort of a screening mammogram and on patients being questioned about transportation needs when scheduling their screening mammograms.

References


