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Abnormal Interpretation Rates of Screening Mammography Among Massachusetts Medicare Hospitals: Unexplained Variation Impacting Quality

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Disclosures

None of the investigators have any relevant disclosures.



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Introduction

- **Abnormal Interpretation Rates (AIR):** quality metric of screening mammograms which require follow-up imaging within 45 days
- National average: **8.8%**
 - Rates too close to 0% may indicate missed cancers
 - Rates greater than 14% may indicate excessive false positive recalls
- **Purpose:** Evaluate AIR in Massachusetts Medicare hospitals and characterize performance based on geographic, demographic, socioeconomic, or facility accreditation factors



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Methods

- Retrospective analysis of **Medicare Hospital Compare** database containing the percentage of outpatients who had a follow-up mammogram, breast ultrasound, or breast MRI within the 45 days after a screening mammogram
 - 07/2015-06/2016 data
 - Hospital data used: name, location, mammography follow-up score for AIR
- **American Hospital Directory** used to gather information on facility characteristics
- **US Census** data used to find population demographics and income statistics for each hospital by ZIP code
- **Breast Imaging Center of Excellence (BCOE)** designation was found using the **American College of Radiology (ACR)** accreditation search site



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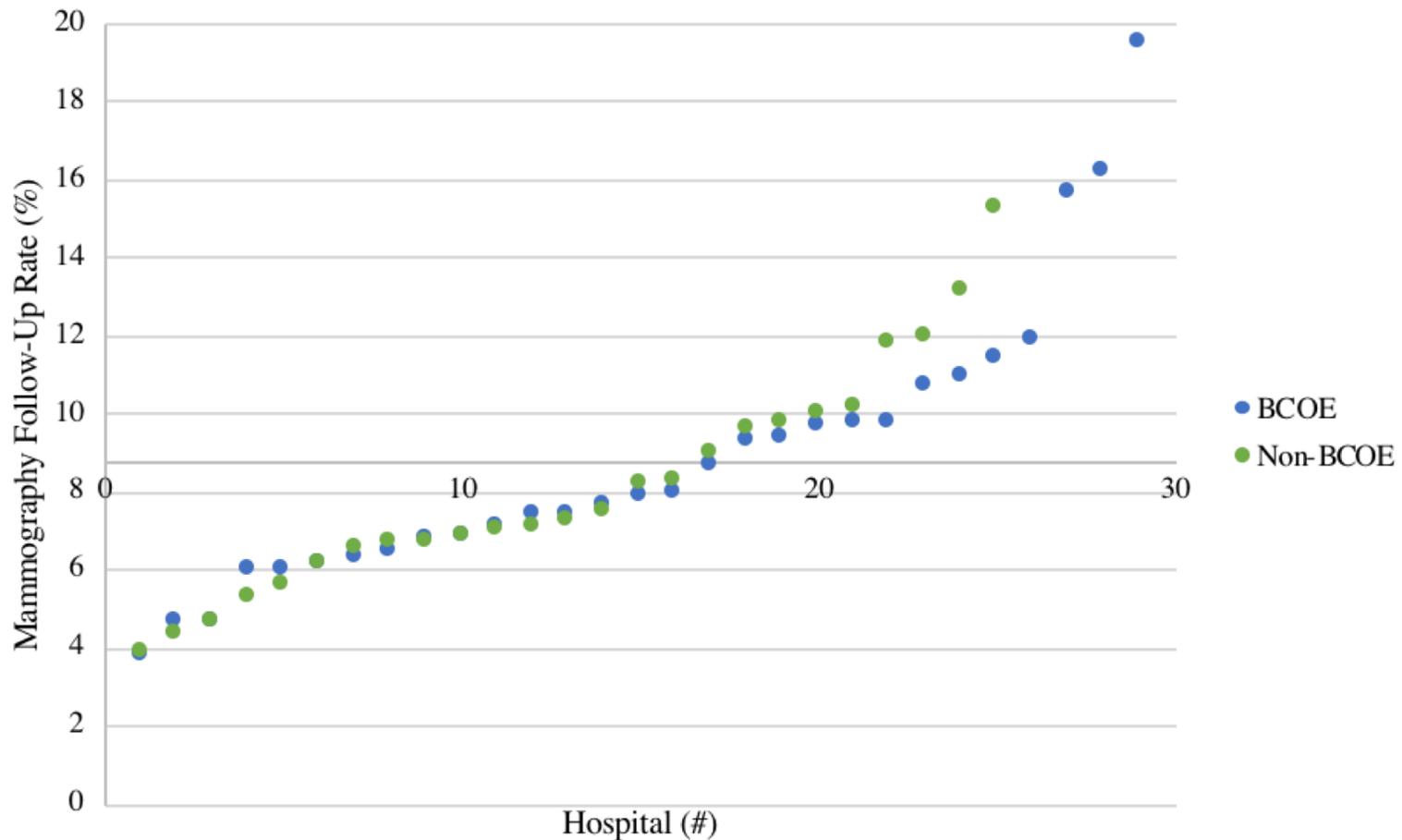


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Results

- 63 hospitals total
 - 54 had mammography follow-up score on record
 - 29 BCOE accredited
- No significant association between sociodemographic variables and AIR of hospital
- AIR ranged from 3.8-19.5%
- Average AIR
 - **BCOE:** 8.8% (range 3.8-19.5%)
 - **Non-BCOE:** 8.1 (range 3.9-15.3%)
 - p=NS

Average Mammography Follow-up Rates in Breast Centers of Excellence (BCOE) and Non-BCOE Hospitals Compared to the National Average





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Conclusions

- Wide unexplained variation in AIR amongst MA hospitals
 - Mean AIR was at the recommended national average
 - BUT, many facilities were far above or below this standard
- No significant association with AIR was observed among the sociodemographic variables of each hospital
- BCOE designation had no significant effect on AIR
- **Efforts beyond the current accreditation process are needed to reduce variation and improve quality of care**



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Thank you!