

# Midstate Radiology Associates: Transforming High-Risk Screening with the Ambry CARE Program®

CASE STUDY



## Overview

Midstate Radiology Associates (MRA) provides diagnostic and therapeutic radiology services across Connecticut, performing over 500,000 exams annually. MRA was among the first radiology groups in the U.S. to set up a high-risk breast cancer screening program. They elevated their services with The Ambry CARE Program® (CARE).

## The Challenge

Between 2018 and 2021, MRA relied on paper forms to collect family histories, leading to:

- > **Incomplete or inconsistent history data** due to patient confusion or missed forms.
- > **Difficulty in adhering to evolving genetic testing guidelines** when identifying who qualified for testing.
- > **Limited use of Tyrer-Cuzick (TC) risk scores** as only patients who received genetic testing received TC scores, missing many at-risk individuals.

These gaps made it challenging to consistently and reliably identify patients at elevated risk for breast or hereditary cancer at scale, reducing opportunities for early detection and preventive care.

## CARE Impact

In 2021, MRA launched CARE across 15 centers. Key features included:



**Universal Breast Cancer Risk Scores:** Calculated lifetime breast cancer risk via TC scores for every patient, not only those undergoing hereditary cancer testing.



**Streamlined Digital History Collection & Assessment:** Gathered personal and family histories from patients using a digital questionnaire, accessible via text or email before their appointment. Data is pulled forward so it can be updated at yearly visits.



**Comprehensive Hereditary Risk Assessment:** Used automated checks against national guidelines to identify patients who qualify for hereditary cancer testing.

With these changes, MRA created a more complete and efficient approach to breast cancer and hereditary risk assessment.

## Results & Outcomes

### Before CARE (2018–2021)

- **168,323** mammograms performed
- **24.6%** identified as genetic test candidates (41,424 patients)
- **12.4%** pursued genetic testing (5,133 patients)
- **6%** tested positive (332 patients)
- **22%** of those who had genetic testing had an elevated TC score ( $\geq 20\%$ )

### After CARE (2021–2024)

- **84,122** patients were sent digital history assessments, **75.8%** completed (63,749)
- **26.3%** eligible for genetic testing (16,819 patients), with **20.7%** proceeding (a 60% increase)
- **9.6%** tested positive (470 patients), and nearly **47%** had a shift in breast cancer risk management
- **400% increase** in patients identified for screening breast MRI: **10.6%** (5,984) based on a TC score  $\geq 20\%$

MRA shared these results and the implications for radiology practices and imaging centers at the San Antonio Breast Cancer Symposium in 2024.<sup>1</sup>

### Voices from MRA

“The transition to the Ambry CARE Program improved our clinic workflows. More importantly, our program is changing patient lives because we can individualize their care based on their history and DNA.”

*Jenna Cooke, DNP, APRN, FNP-C, CGRA*

“My sister died of breast cancer that was diagnosed at stage IV. My breast cancer was caught early, and I am so grateful for that. Without this program, my story could have been completely different.”

*Angie Butler, MRA CARE Patient identified as high-risk based on breast cancer risk score*

## Transforming Patient Care

By leveraging a standardized, digital-first strategy, MRA:

- Identifies more high-risk patients through universal TC scoring and automated assessment of medical & family history against national genetic testing guidelines
- Promotes personalized, proactive care for patients who need advanced screening and risk-reducing services
- Enhances workflows for improved practice productivity, with automated documentation at each step of the patient journey
- Continually improves their program with support from data insights and performance metrics provided by Ambry

With over 6,000 patients already seeing tangible differences in their healthcare journeys, MRA sets an example for radiology practices and imaging centers nationwide.

#### References

1. Cooke, J., Burgess, M., & Fecteau, H. (2024, December). *Enhancing patient care: A digital approach improves universal breast cancer risk stratification in imaging centers*. Abstract presented at the San Antonio Breast Cancer Symposium, San Antonio, TX, United States.