Increased Compliance of Patients Referred to Genetic Counseling After Introduction of a Web-Based Risk-Stratification Tool



Tawanna St. Lewis*, MS, CGC, Kaleena Wagner*, MS, CGC, Heather Fecteau+, MS, CGC, Shannon Kieran+, MS, CGC, MBA
*Medical City Dallas Hospital Dallas, Tx; *Ambry Genetics Aliso Viejo, CA

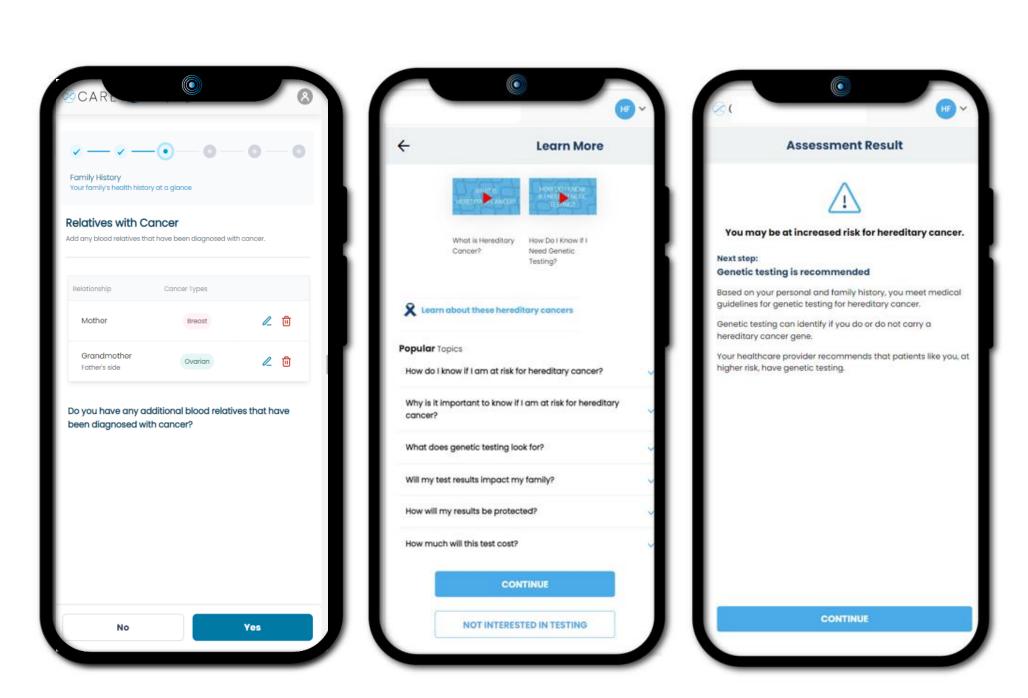
Background

- Patient compliance with referrals plays a crucial role in accessing genetic counseling and risk stratification services
- Medical City of Dallas (MCD) Genetics Clinic introduced a web-based risk-stratification tool to aid in referrals for genetic counseling
- The digital tool provided pre-test education videos, initial risk assessments, and visual representations of family history
- After introduction of the digital tool, an increase in the number of referred patients attending appointments and a reduction in noncompliant referrals was observed.

Methods

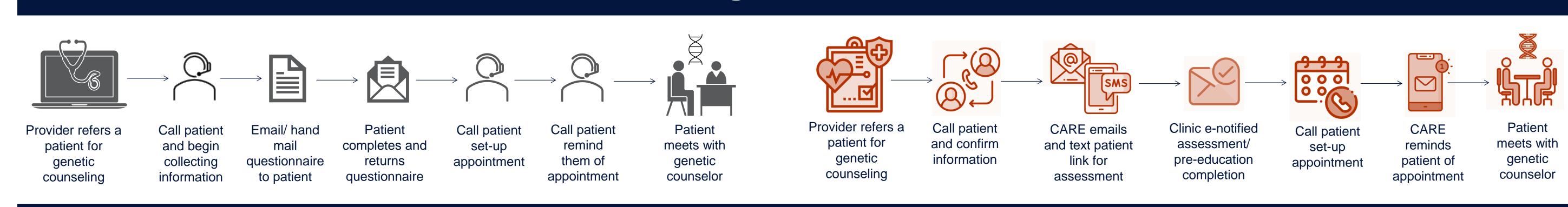
- MCD relied on paper questionnaires to be completed prior to genetic counseling appointments before 2022.
- After 2022, eligible patients were invited to digital platform, Ambry CARE program[®], by SMS and/or email to complete the assessment and pretest education
- Personal and family history was assessed by Tyrer-Cuzick risk algorithm (v8.0)
- Personal and family history was reviewed for genetic testing criteria based on published HBOC, Lynch, and FAP guidelines (NCCN)
- Data was compared from 2020-2021 prior to having a digital tool to after March 2022-2023 when the digital platform was implemented at MCD
- Reported outcomes include genetic counseling referrals, scheduled appointments, affected and unaffected probands seen at genetics clinic, number of individuals opting for genetic testing, and testing outcomes

Figure 1: Web-Based Platform: Patient Assessment and Education



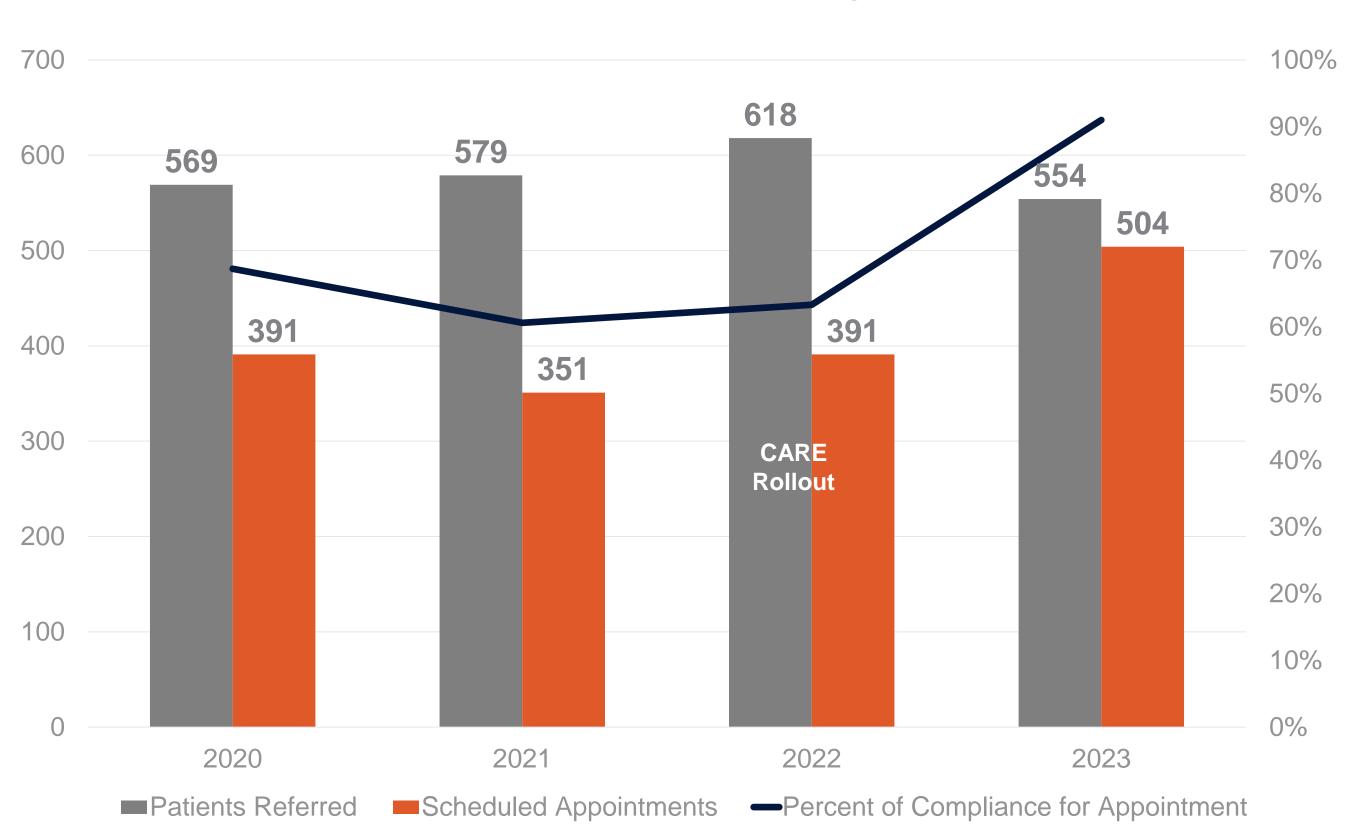
This research was supported (in whole or in part) by HCA Healthcare and/or an HCA Healthcare affiliated entity. The views expressed in this publication represent those of the author(s) and do not necessarily represent the official views of HCA Healthcare or any of its affiliated entities.

Process to be Seen for Genetic Counseling Before and After Introduction of Web-Based Tool



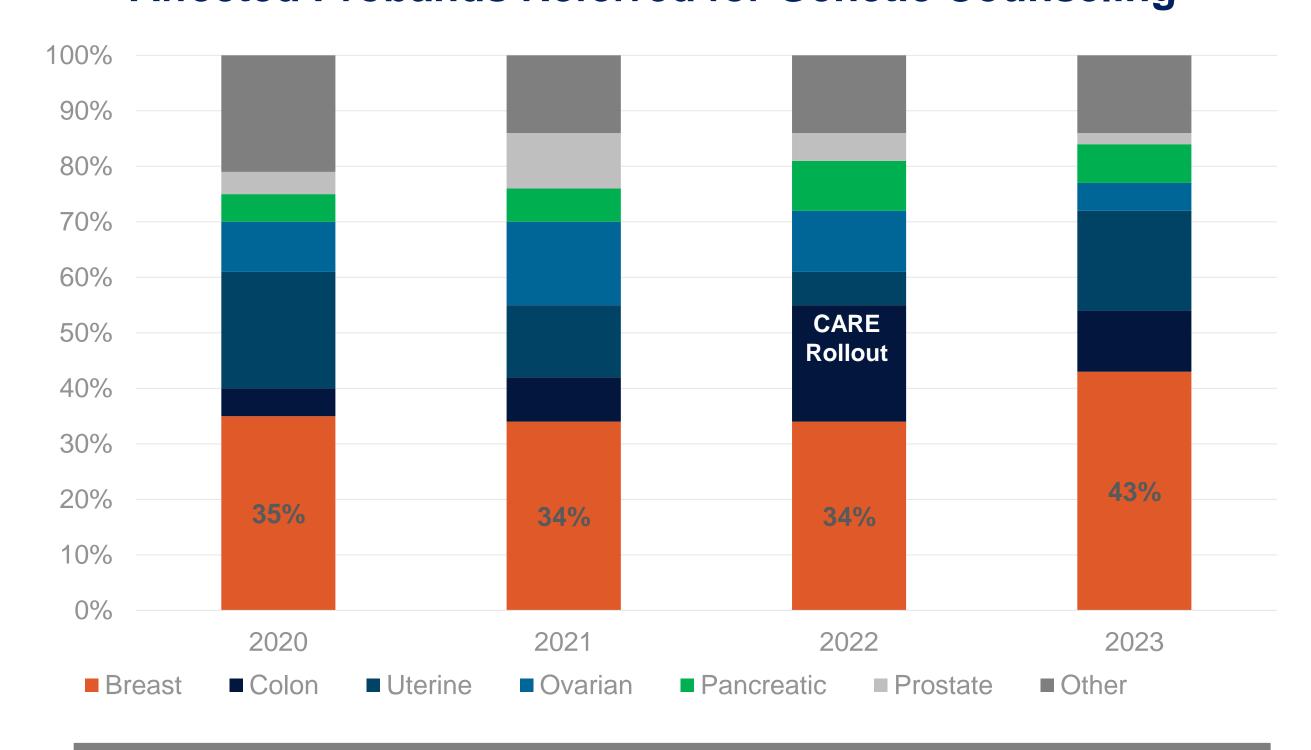
Results

Figure 2: Number of Genetic Counseling Referrals, Appointments, and Compliance Rate Before and After Digital Tool Implementation



90% of Patients Referred for Genetic Counseling Scheduled an Appointment After Engagement with Digital Tool

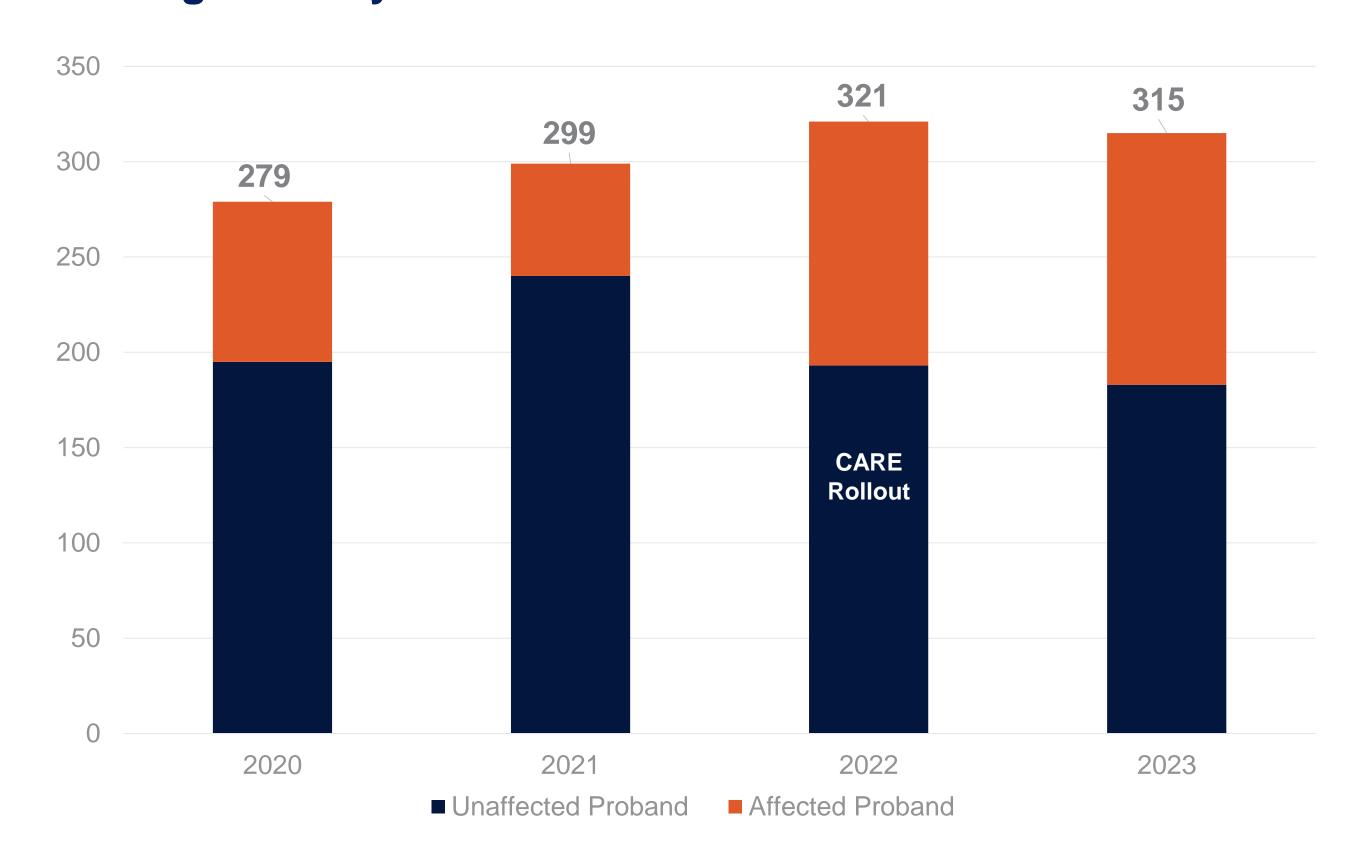
Figure 4: Percentage Breakdown of Cancer Diagnoses Among Affected Probands Referred for Genetic Counseling



Growth in Probands With a Personal History of Breast Cancer Was

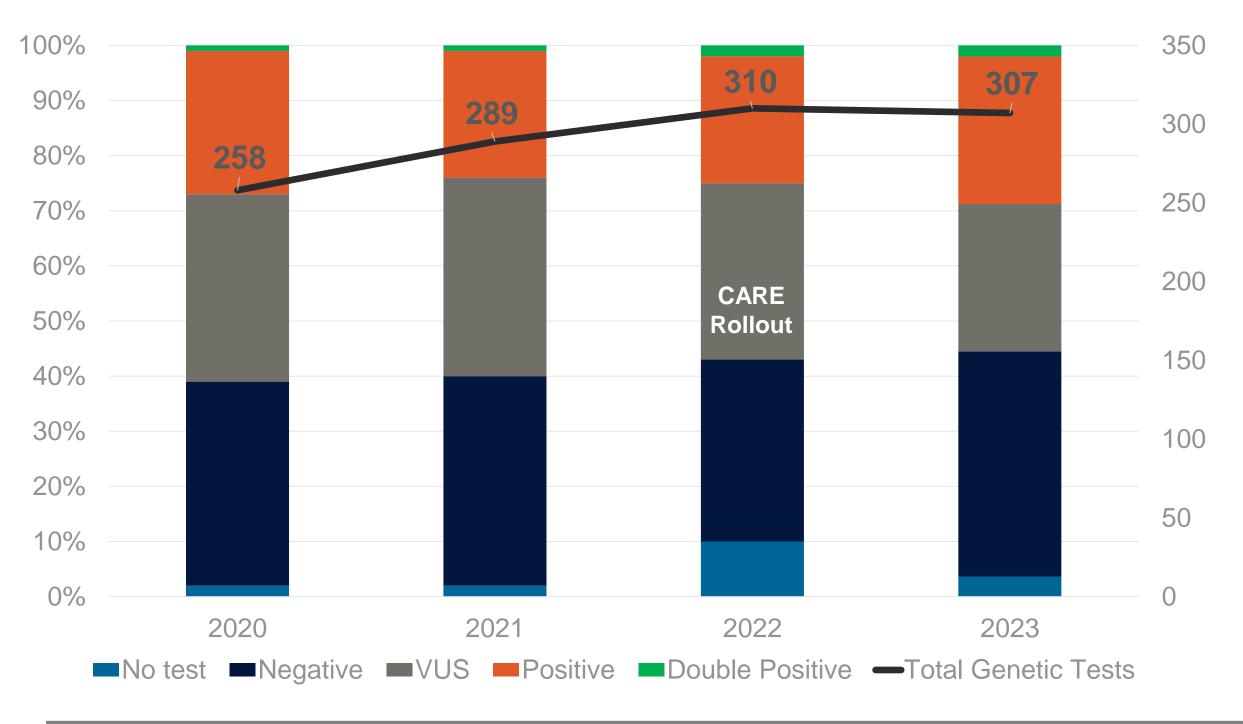
Observed After 2022.

Figure 3: Number of Patients Seen for Genetic Counseling Categorized by Proband Status: Affected or Unaffected



After 2022: 11% Increase in Patients Seeking Genetic Counseling; 36% Increase in Affected Probands

Figure 5: Total Number of Patients Undergoing Genetic Testing and Percentage Distribution of Test Outcomes



15% Increase in Patients Choosing Genetic Testing, With a Consistent Positivity Rate of 23-26% Over Four Years

Conclusion

Integrating the CARE platform into clinic workflow boosted genetic counseling appointment rates for referred patients and raised the percentage of referred patients seen in clinic.

This integration potentially contributed to more patients with current or prior cancer diagnoses attending their genetic counseling appointments as recommended by their physicians.

