GraTeFUl Project: Genetic Testing Follow Up Quality Project

Abstract P437

Introduction: Introduction: Genetic testing technology has improved rapidly in the past 10 years. The breast cancer team (medical oncology, surgical breast oncology) at Henry Ford St. John Hospital in Detroit sees many patients who had genetic testing originally performed between 1998-2010, at the time of their initial cancer diagnosis. Broader multi-gene panel testing began to be offered around 2014 with more expansive gene interrogation. NCCN guidelines Version 1.2026 for breast cancers now include recommendations for patients to have updated multi-gene panel testing if they had single gene or limited testing in the past. A retrospective chart review done by our team in 2025 identified only 2.4% of patients had updated genetic testing. The objective of this quality improvement project was to improve physician awareness about updated recommendations for multi-gene panel testing in patients who previously tested negative.

Methods: An eight-question survey was administered at pre- and post-educational lectures. The survey assessed provider role (e.g., oncology fellow, oncologist, breast surgeon, radiation oncologist, nurse practitioner, etc.). Other questions evaluated which factors were reviewed when the provider saw a cancer patient for follow up, such as changes to their family history, advancements in genetic testing, and how likely a provider would refer a patient for updated genetic testing. An educational lecture with a slide deck overviewing multigene testing advances, and pearls from clinical cases was given at the community hospital's Breast Tumor Board, GI Tumor Board, Oncology Tumor Board, and Oncology Fellows Didactic Lecture. A Fact Sheet on Updated testing was also disseminated to clinical practices at our cancer center.

Results: Overall, 53 participants participated in this study including surgeons, oncologists, radiation oncologists, oncology fellows, surgical residents, and nurse practitioners/nurse navigators. Paired pre-post survey data were available for 21 participants. The following analysis is on the 21 participants; the McNemar chi-squared test was used.

Question 2 on the survey asked: "when seeing a patient with a personal history of cancer, which factors do you review?" Almost all participants checked a new cancer diagnosis for pre-post (20, 1 missing). After the lecture 5 out of 6 participants who did not check family history initially, did check this as a factor they would review, suggesting that the lecture impressed on participants the importance of reviewing family history. Advancements in genetic technology did not impress the participants given 12 did not check this as a factor before the lecture, and 10 did not check this following the lecture. Question 4 asked "do you counsel patients on updated genetic testing?" before the lecture 10 participants said NO, four of these participants checked yes after the educational lecture suggesting that the lectures were impactful for a provider/patient conversation on updates in genetics for their care. Question 6 asked do you provide patients with information(handout): Pre-survey 14 participants said no, after which 6 said yes and 8 still said no. The genetics team had provided a FACT sheet which may have contributed to more participants saying yes.

Conclusion: Updated genetic testing may identify new actionable genetic findings that can impact patients and their families. Ongoing education with providers is important so that in follow-up encounters they bring up the value of multigene testing to patients who had previously limited genetic testing. Because of the small sample size, generalizations are challenging, but continued education of providers on updates in genetic testing may be of value and potentially providing providers with handouts to serve as an icebreaker to discuss updated genetic testing for them and their families by be useful. The genetics team will continue to work on handouts that can be given to patients to aid in educating them about updated genetic testing.

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