

# Impact of a Nurse Navigator on Genomic Testing and Timely Treatment Decision Making in Patients With Breast Cancer

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The purpose of this quality improvement project was to define best practices for identifying appropriate patients for genomic testing and improve timeliness for ordering tests and reporting results. An interdisciplinary team of surgeons, radiologists, medical oncologists, and nurses agreed that the RN navigator would be the key person to facilitate timely access to genomic profiling.

## At a Glance

- Genomic profiling has become the standard of care for patients with early-stage breast cancer to assist in developing individualized treatment plans.
- Nurse navigators can play a key role in improving timeliness of care.
- The APN-RN model led to improvements in turnaround time and compliance with the National Comprehensive Cancer Network's recommendations for genomic testing.

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Along with the diagnosis of breast cancer comes many decisions regarding treatment options. At Saint Joseph Hospital in Nashua, New Hampshire, a genomic/gene expression assay, Oncotype DX®, is used to further refine risk stratification and assist with decision making regarding chemotherapy as a treatment option for breast cancer (Paik et al., 2004). Genomic profiling is performed on early-stage, estrogen receptor-positive (ER+), HER2/neu-negative breast cancer to assist in developing individualized treatment plans.

Barriers were found in identifying eligible patients, timely ordering of tests, and distributing test results to the appropriate discipline. Oncotype DX testing was being ordered at the initial medical oncology

consultation, about two weeks after surgery. This resulted in delays in initiating treatment, requiring patients to have additional appointments to discuss results and participate in joint decision making regarding treatment (see Figure 1).

The oncology nurse navigator has knowledge of the healthcare system, is a skilled communicator, and provides holistic care. The navigator empowers patients and families with education and knowledge, and facilitates timely access to appropriate healthcare resources (Desimini et al., 2011). Within the interdisciplinary team, the nurse navigator works as an advocate, care provider, educator, counselor, and facilitator to ensure that every patient receives comprehensive, timely, and quality healthcare services (Case, 2011; Swan-

son & Koh, 2010). The role of the navigator can be that of an RN or an APN.

## Literature Review

Breast cancer mortality has declined in the past 20 years. Rapid advancements in technology, molecular biology, and genetics have had a great impact on diagnosis and treatment and individualized treatment plans are on the rise (National Cancer Institute, 2015). Attention is now focused on who should not receive chemotherapy rather than who should receive it.

Tumors of the same histologic type may have individual mutations with different treatment responses. Tumor profiling is the evaluation of genomic expression, which is useful in identifying a cancer diagnosis, prognosis, and therapeutics (Dacic, 2011). Oncotype DX provides quantitative assessment of chemotherapy benefit and risk of distant recurrence, which increases confidence in creating individualized treatment plans (Genomic Health, 2015). The Oncotype DX assay gene panel and recurrence score were validated in the National Surgical Adjuvant Breast and Bowel Project B-14, demonstrating that the recurrence score can be used as an accurate estimate of the risk of distant recurrence and overall survival in individual patients (Paik et al., 2004). The National Comprehensive Cancer Network ([NCCN], 2015) suggests the use of genomic profiling to further refine risks and benefits for adjuvant chemotherapy for women with early-stage ER+, HER2/neu-negative tumors measuring greater than 0.5 cm.

## APN-RN Nurse Navigators

The nurse navigator is a key member of an interdisciplinary team (Freeman &