Assessing the Status of BRCA Testing and the Challenges Faced by Cancer Care Teams in the Community

Summary of Survey Findings
April 2018
In March 2018, the Association of Community Cancer Centers (ACCC) surveyed 95 community oncology practitioners around the United States to assess the status of BRCA testing and the challenges faced by cancer care teams. Following is a summary of survey data collected.

[Editor’s note: Due to rounding, figures presented in this report may not add to 100%.]

Only 7% of respondents reported routinely ordering BRCA testing for all of their early-stage breast cancer patients, while the others reported ordering BRCA testing for patients who were younger than age 50 when diagnosed (74%), had a family history of either BRCA mutation (85%) or breast/ovarian cancer (86%), or had been diagnosed with triple negative breast cancer (75%).
For patients with metastatic breast cancer, only 14% of respondents reported routinely ordering BRCA mutation testing for all patients, while others reported ordering testing for patients who were younger than age 50 when diagnosed (64%), had a family history of BRCA mutation (77%) or breast/ovarian cancer (79%), or had been diagnosed with triple negative breast cancer (65%). Only 40% of practitioners reported routinely ordering BRCA testing for patients who had not been previously tested for BRCA mutation, and who had progressed beyond several lines of therapy.
The majority of respondents (82%) reported that 50% or fewer of early breast cancer patients receiving care at their facility have ever had germline BRCA mutation testing, whereas 87% reported the same with metastatic patients. Genetic counselors most often order the mutation test (37%), followed by medical oncologists (29%), surgeons (22%), and nursing professionals (7%).

What is your best estimate of the percentage of patients, managed and treated at your center in the past three months, who have ever had germline BRCA mutation testing?

![Bar chart showing the percentage of patients with germline BRCA mutation testing.]

When queried on BRCA testing guidelines utilization, many reported following one or more guidelines. Ninety-five percent (95%) of respondents indicated that they follow guidelines developed by the National Comprehensive Cancer Network (NCCN), 31% follow American Society of Clinical Oncology (ASCO) guidelines, 17% follow American Society of Breast Surgeons (ASBS) guidelines, and 8% employ a protocol developed by their institution/multidisciplinary team for ordering BRCA mutation testing. Three percent (3%) reported using no specific guidelines for BRCA mutation testing.

<table>
<thead>
<tr>
<th>Guideline</th>
<th>Percentage</th>
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<tr>
<td>National Comprehensive Cancer Network (NCCN)</td>
<td>95%</td>
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<tr>
<td>American Society of Breast Surgeons (ASBS)</td>
<td>17%</td>
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<tr>
<td>American Society of Clinical Oncology (ASCO)</td>
<td>31%</td>
</tr>
<tr>
<td>A protocol developed by your institution/multidisciplinary team</td>
<td>8%</td>
</tr>
<tr>
<td>No specific guidelines</td>
<td>3%</td>
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While 15% of respondents reported no access to or routine use of a genetic counselor, most centers reported utilizing a genetic counselor either onsite (69%) or via tele-counseling (16%). Six percent (6%) reported referring patients to the closest available genetic counselor at another institution.

When available, genetic counseling consults are most often ordered by the medical oncologist (47%), surgeon (37%), or nurse navigator/nurse practitioner (8%), and the BRCA mutation test is ordered by the genetic counselor (37%), medical oncologist (29%), surgeon (22%), and nurse navigator/nurse practitioner/nurse certified in genetics (7%). At most practices that do not have a genetic counselor, a physician, nurse navigator, or nurse practitioner educates the patient about BRCA mutations before ordering the test, as well as after the test results come in.
Who most often refers the patient for a genetic counseling appointment at your center?

- Medical oncologist: 47%
- Surgeon: 37%
- Nurse practitioner: 2%
- Oncology nurse: 0%
- Nurse navigator: 6%
- Genetic counselor: 0%
- Nurse certified in genetics: 0%
- Self-referral: 1%
- Other: 6%

Who most often initiates the order for the BRCA mutation test at your center?

- Medical oncologist: 29%
- Surgeon: 22%
- Nurse practitioner: 5%
- Oncology nurse: 0%
- Nurse navigator: 1%
- Genetic counselor: 37%
- Nurse certified in genetics: 1%
- Other: 4%
Among centers that reported providing access to a genetic counselor, 75% average 2 weeks or less wait time to get an appointment with a counselor, 12% average 2-3 weeks, and 13% average longer than 3 weeks. Reported turnaround for receipt of BRCA germline test results from the lab varied, with 70% of respondents indicating an average time of less than 2 weeks, 27% waiting 2-3 weeks, and 4% reporting more than a one week wait.

For patients with early breast cancer, 85% of centers reported that they usually order the expanded sequencing panel covering multiple genes; 15% of centers reported ordering germline BRCA 1 and 2 testing. For patients with metastatic breast cancer, 80% of centers reported that they usually order the expanded sequencing panel covering multiple genes; 20% of centers reported ordering germline BRCA 1 and 2.
Many clinicians (82%) reported that having somatic testing results on metastatic patients does not influence their decision to order germline testing; 18% would order germline testing only if a BRCA mutation were present in somatic testing results.

Survey respondents reported the following barriers to routine BRCA mutation testing:

<table>
<thead>
<tr>
<th>Challenges</th>
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<tr>
<td>Challenges with respect to identification of patients who meet criteria</td>
<td>21%</td>
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<td>Systems-based challenges related to ordering tests and communicating test results (e.g., not part of our standard protocol)</td>
<td>12%</td>
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<td>Reimbursement for testing</td>
<td>32%</td>
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<tr>
<td>Reimbursement for counseling</td>
<td>21%</td>
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<tr>
<td>Access to genetic counselors</td>
<td>28%</td>
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<td>Turnaround time for BRCA mutation testing</td>
<td>27%</td>
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<tr>
<td>Unclear clinical benefit of BRCA mutation testing</td>
<td>6%</td>
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<tr>
<td>Patient-related barriers (e.g., patient fear, patient refusal, concerns for future insurability following genetic testing)</td>
<td>59%</td>
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<tr>
<td>Other</td>
<td>10%</td>
</tr>
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Most of the practitioners polled (95%) are at least somewhat familiar with the mechanism of action of PARP inhibitors in patients harboring BRCA1 or BRCA2 mutations:

How familiar are you with the mechanism of action of PARP inhibitors in patients harboring BRCA1 and BRCA2 mutations?

- Extremely Familiar: 5%
- Very Familiar: 18%
- Somewhat Familiar: 45%
- Not familiar at all: 32%

The majority of respondents (67%) indicated that their institution prescribes PARP inhibitors to patients with metastatic breast cancer with BRCA mutations:

Does your practice prescribe PARP inhibitors to patients with metastatic breast cancer with BRCA mutations?

- Yes: 67%
- No: 16%
- Other: 17%
Thirty percent (30%) of the respondents are participating in clinical trials with PARP inhibitors in the early breast cancer setting; 38% are participating in the metastatic breast cancer setting:

Survey respondents report that they have referred their patients to other centers for clinical trials with PARP inhibitors in both the early breast cancer setting (31%) and the metastatic breast cancer setting (31%).
Summary

In a survey of community oncology practitioners conducted by ACCC to assess the status of BRCA mutation testing for patients with breast cancer, more than 80% of respondents reported that 50% or fewer of their patients with early or metastatic breast cancer care have ever had germline BRCA mutation testing. Barriers to BRCA mutation testing include patient-related barriers (e.g., patient fear, patient refusal, concerns for future insurability following genetic testing) and provider/institutional challenges (e.g., identification of patients who meet criteria, reimbursement for testing and counseling, access to genetic counselors, turnaround time for BRCA mutation testing, systems-based challenges related to ordering tests and communicating test results, and unclear about clinical benefits of testing). Significant practice variations were also identified among the respondents in terms of the patients they selected for routine BRCA mutation testing. While the majority of respondents indicated that they follow the guidelines developed by the National Comprehensive Cancer Network (NCCN) or the American Society of Clinical Oncology (ASCO) for ordering BRCA mutation testing, 3% reported using no specific guidelines.

More than 80% of practitioners report that they usually order expanded sequencing panel covering multiple genes for patients with both early and metastatic breast cancer. Many clinicians (82%) report that having somatic testing results on metastatic patients does not influence their decision to order germline testing; 18% would order germline testing only if a BRCA mutation were present in somatic testing results. While most respondents indicated that genetic counselors most often ordered BRCA mutation testing at their centers, 16% of practitioners did not routinely utilize a genetic counselor. In terms of familiarity with targeted treatment options for patients harboring BRCA1 or BRCA2 mutations, most of the community practitioners who responded to the survey were at least somewhat familiar with the mechanism of action for PARP inhibitors in patients with metastatic breast cancer harboring BRCA mutations. Many respondents (67%) have prescribed PARP inhibitors to patients with BRCA-mutated metastatic breast cancer. A third of the respondents indicated that they have referred their patients to clinical trials with PARP inhibitors in the early or metastatic breast cancer setting.
A publication from the ACCC education program, “Quality Improvement in Breast Cancer Through BRCA Testing.” Learn more at accc-cancer.org/projects/brca/overview.

The Association of Community Cancer Centers (ACCC) is the leading education and advocacy organization for the multidisciplinary cancer team. ACCC is a powerful network of 25,000 cancer care professionals from 2,100 hospitals and practices nationwide. ACCC is recognized as the premier provider of resources for the entire oncology care team. For more information visit accc-cancer.org or call 301.984.9496. Follow us on Facebook, Twitter, and LinkedIn, and read our blog, ACCCBuzz.

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