Implementing multidisciplinary strategic planning

- Having lead pathologists and oncologists present
- Discontinuing contracts of physician partners
- Using peer pressure to elevate non-utilizers

Strategies to Overcome Barriers

- Unwillingness of administration to take risks and
- Lack of collaborative relationship between disciplines

Barriers to Use of Molecular Testing

- Assumption of risk that some tests may be a loss
- Support for significant resources up front with
- Resources to perform comparative analysis

Challenges Ahead

- Acheiving buy-in from all physicians and consensus on
- Competing capital needs—budget constraints,
- Early involvement of entire multidisciplinary team

Strategies to Overcome Barriers

- Using peer pressure to elevate non-colleagues (physician to physician)
- Discontinuing contracts of physician partners willing to elevate the standard of practice
- Failing lead pathologists and oncologists prevent evidence of necessity to keep current with clinical offerings of competing health systems to prevent loss of downstream revenue
- Implementing multidisciplinary strategic planning processes that focus on developing team collaboration and communication strategies

Impact of Cost of Testing

Pathologist Survey

How often does cost of biomarker testing impact whether or not the test is ordered/ performed?

For every case

- Other

For self-pay patients

- Other

For select patients

- Never a factor

Don’t Know

For every case

- Other

Preparing for New Tests in House

Just over one third of multidisciplinary respon- dents said they intend to bring new molecular tests in house within six months, while 35.3% of pathologists reported they planned to brings new molecular tests in house within the same time frame.

Most Respondents Believe Molecular Testing Will Save the Health System Money

Pathologist Survey

How often does cost of biomarker testing impact whether or not the test is ordered/ performed?

For every case

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For select patients

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For every case

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Members of the Advisory Panel include:

- John M. Yelcick, MD
- Lonnie K. Wen, PhD (sponsor delegate)
- Randall A. Oyer, MD
- Cary Presant, MD, MBA
- Zaven R. Norigian, Jr., PharmD, BCOP
- Samuel Caughron, MD, FACP
- William J. Laffey, MD
- Samuel D. Younker, MD
- Munger, K. P. (co-chair)
- Levente, D. V.
- Don, B. A.
- Abraham, B. K.
- Williams, M. A.
- O’Hagan, C. M.
- Kay, A. L.
- Lally, L. R.
- Bhardwaj, S. K.
- Hsu, J. L.
- Hsu, N. Y.
- Bhatia, S. A.
- Hartman, L. D.
- Wei, W. Y.
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What We Did
In the spring of 2012, ACCC's Center for Provider Education established an Advisory Panel to help guide the project. With the Advisory Panel's input and oversight, the consulting firm of Health Equity Associates conducted two survey instruments to inform an environmental scan of molecular testing in the community setting. Each survey addressed adoption of molecular testing with a focus on three leading disease sites: breast cancer, lung cancer, and melanoma. The two online surveys, which were promoted to ACCC members via email, were conducted during the summer of 2012. Health Equity Associates provided survey analysis, conducted follow-up interviews, and developed four case studies of effective practices through September 2012. Preliminary project results were reported at the 32nd ACCC National Oncology Conference in October 2012. The final project report including an annotated bibliography and case studies is available to ACCC members at accc.org/moleculartesting.

Members of the Advisory Panel include: Samuel Caughron, MD, FACP; William L. LaFeely MBA; Zaven R. Norigian, Jr., PharmD, BCOP; Randall A. Oyer, MD; Cary Presant, MD; Samuel Caughron, MD, FACP; William J. Laffey, MBA; Lonnie K. Wen, PhD (sponsor delegate); and Gail W. Probst, RN, MS, ANP, OCN, AOCN, NE-BC; John M. Yelcick, MD.

Survey Overview
Each survey instrument was designed to further an understanding of current utilization of molecular testing in the community setting, as well as any barriers or effective practices in integration of molecular tests. The multidisciplinary survey targeted oncologists, administrators, nurses, and pharmacists. Fifty-two cancer programs submitted responses, representing a hospital-employed pathology department. Most pathologist survey respondents (75.6%) have a policy in place to consider adoption of new molecular tests.

Survey Findings
The majority of multidisciplinary respondents were hospital-based cancer programs. Of these, 5% reported that cancer programs work with a hospital-employed pathology department. Most pathologist survey respondents (75.6%) have a policy in place to consider adoption of new molecular tests. Multidisciplinary Respondents by Role

<table>
<thead>
<tr>
<th>Role</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Not Applicable (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Oncologist</td>
<td>100</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Genetic Counselor</td>
<td>99.2</td>
<td></td>
<td>0.8</td>
</tr>
<tr>
<td>Pathologist</td>
<td>99.2</td>
<td>0.8</td>
<td>0</td>
</tr>
<tr>
<td>Independent, private program</td>
<td>87.5</td>
<td>4.1</td>
<td>8.4</td>
</tr>
<tr>
<td>Other</td>
<td>66.7</td>
<td>16.7</td>
<td>16.7</td>
</tr>
<tr>
<td>Academic Setting</td>
<td>55.6</td>
<td>33.3</td>
<td>11.1</td>
</tr>
<tr>
<td>Pathologist</td>
<td>11.1</td>
<td>8.8</td>
<td>79.1</td>
</tr>
<tr>
<td>Independent, private program</td>
<td>11.1</td>
<td>8.8</td>
<td>79.1</td>
</tr>
<tr>
<td>Other</td>
<td>0.0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Academic Setting</td>
<td>0.0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Respondents by Setting of Care

<table>
<thead>
<tr>
<th>Setting</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Not Applicable (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital-based cancer center</td>
<td>91.1</td>
<td>8.9</td>
<td>0</td>
</tr>
<tr>
<td>Private oncology practice</td>
<td>94.5</td>
<td>5.5</td>
<td>0</td>
</tr>
<tr>
<td>Freestanding cancer center</td>
<td>88.8</td>
<td>11.2</td>
<td>0</td>
</tr>
<tr>
<td>Academic setting</td>
<td>77.3</td>
<td>22.7</td>
<td>0</td>
</tr>
</tbody>
</table>

Survey Questions
Several discipline-specific questions. Seven-hundred and eighty percent of participants had been exposed to molecular testing in the community setting. Approximately 25% were aware of this exposure, and awareness was greater among oncologists and pathologists.

Policy on Obtaining Additional Tissue

Most multidisciplinary respondents reported no policy/procedure on obtaining tissue for retesting.

Policy on Providing Additional Tissue

Most multidisciplinary respondents (52.5%) reported having a formal policy on using molecular tests.

Who Takes the Lead in Adoption Policy/Process?

According to 58.8% of pathologist respondents, oncologists provide primary guidance on biomarker testing, while 38% of multidisciplinary respondents reported that pathologists take the lead.

Where is Education on Molecular Testing Taking Place?

Most respondents reported that education on molecular testing is provided by Freeman (44.8%), continuing medical education (40.5%), and self-directed (35%).

Does Your Program Have a QI/PI Process in Place to Consider Adoption of New Molecular Tests?

Nearly three-quarters of multidisciplinary respondents (76.6%) reported that their facility has administrative policies, guidelines, or procedures regarding use of molecular tests.

Use of Guidelines

Most multidisciplinary respondents (63.5%) report following guidelines on use of molecular testing.

Guidelines Most Used

<table>
<thead>
<tr>
<th>Organization</th>
<th>Yes (%)</th>
<th>No (%)</th>
<th>Don’t Know (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCCN</td>
<td>45</td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td>ASCO</td>
<td>31</td>
<td>15</td>
<td>14</td>
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<tr>
<td>CAP</td>
<td>26</td>
<td>18</td>
<td>16</td>
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</table>

For instance, if you think about personalized medicine, then there is no end to the number of tests that you could perform.

—Focus group participant
Survey Findings
The majority of multidisciplinary respondents were hospital-based cancer programs. Of those, 70.6% reported that cancer programs work with a hospital-employed pathology department. Most pathologist survey respondents (71.9%) were associated with a independent, private pathology group.

Respondents by Setting of Care

<table>
<thead>
<tr>
<th>Setting of Care</th>
<th>MultiSurvey</th>
<th>Pathologist Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital-based cancer center</td>
<td>75.6%</td>
<td>70.6%</td>
</tr>
<tr>
<td>Private oncology practice</td>
<td>11.8%</td>
<td></td>
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</table>

Who Takes the Lead in Adoption Policy/Process?
According to 58.8% of pathologist respondents, oncologists provide primary guidance on biomarker testing, while 38% of multidisciplinary respondents reported that pathologists take the lead.

Is a Policy or Process in Place to Adopt New Molecular Tests?
Two-thirds of pathologists surveyed (66.7%) indicated their facility has administrative guidelines, policies, or procedures regarding use of molecular tests. With respect to criteria for adoption of new molecular tests (i.e., clinical criteria referred to, evidence-based guidelines), 52.1% reported they have criteria while the same number have not yet established such criteria. The remaining 3% indicated that they intended to implement criteria in the next year.

Policy on Obtaining Additional Tissue
Most multidisciplinary respondents report no policy/procedure on obtaining tissue for retesting.

Questions Related to Molecular Testing in Standard of Care by Disease Site
Breast cancer was most likely to have required molecular oncology testing incorporated into the cancer program’s standard of care as reported by 93.3% of multidisciplinary respondents. Six in ten respondents stated molecular testing was built into lung cancer standard of care, about the same as that reported for melanoma. Nearly 46% reported that molecular testing was included under colon cancer standard of care.
Effective Practices for Integrating Molecular Testing
Project findings identified the following key effective practices in integrating molecular testing in the community setting:

1. Physician champions
   • Pathologist and medical oncologist champions for molecular testing
   • Strong collaborative relationship between disciplines

2. Administrative support
   • Resources to perform comparative analysis
   • Support for significant resources up front with return to follow later

3. Physician champions
   • Unwillingness of administration to take risks and
   • Need for significant investment; competing capital priorities

4. Genetic counseling and care coordination
   • Resources to perform genetic counseling and care coordination

5. Ongoing staff education on molecular testing
   • Cancer conferences
   • Tumor boards
   • Journal clubs
   • Staff dedicated to coordinating care across settings, i.e., patient navigators

Barriers to Use of Molecular Testing
• Lack of interest by members of the physician team (pathologists and/or specialty physicians) to transition to individualized care
• Lack of collaborative relationship between a specialty physician and the institution
• Need for significant investment, competing capital priorities
• Unwillingness of administration to take risks and invest time, money, and staff up front

Strategies to Overcome Barriers
• Using peer pressure to elevate non-physicians (physician to physician)
• Discontinuing contracts of physician partners
• Discontinuing contracts of physician partners
• Using peer pressure to elevate non-utilizers
• Staff dedicated to coordinating care across settings, i.e., patient navigators
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• Staff dedicated to coordinating care across settings, i.e., patient navigators

Challenges Ahead
• Achieving buy-in from all physicians and consensus on program needs
• Competing capital needs—budget constraints, prioritizing all new capital investments
• Keeping up with the pace of change

Impact of Cost of Testing
Pathologist Survey
How often does cost of biomarker testing impact whether or not the test is ordered/performed?

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Molecular Testing in the Community Oncology Setting

ACCC Established the Molecular Testing in the Community Oncology Setting project to:
• Identify a variety of community-based cancer programs that are succeeding in implementing molecular testing, thereby improving patient care
• Develop strategies that exemplify key success factors and effective practices in the implementation of molecular testing
• Increase in number and complexity of molecular tests (both diagnostic and therapeutic) for oncology
• An estimated 2,000 molecular tests (oncology and non-oncology) are currently available and about 1,000 new tests are launched each year
• New oncology drugs with companion diagnostic tests approved by the FDA
• No one-size-fits-all approach to integration or use of molecular tests in the community setting

Molecular Testing in the Community Oncology Setting

Why This Project Now?
• Growth in use of molecular biomarkers in clinical decision making
• Increase in number and complexity of molecular tests (both diagnostic and therapeutic) for oncology
• An estimated 2,000 molecular tests (oncology and non-oncology) are currently available and about 1,000 new tests are launched each year
• New oncology drugs with companion diagnostic tests approved by the FDA
• No one-size-fits-all approach to integration or use of molecular tests in the community setting

For more on this project, visit www.accc-cancer.org/moleculartesting
Challenges Ahead

- Achieving buy-in from all physicians and consensus on program needs
- Competing capital needs—budget constraints, prioritizing all new capital investments
- Keeping up with the pace of change

Strategies to Overcome Barriers

- Using peer pressure to elevate non-utilizers to transition to individualized care
- Lack of collaborative relationship between specialty physicians
- Need for significant investment; competing capital needs—budget constraints, prioritizing all new capital investments
- Unwilling to elevate the standard of practice
- Unwilling to educate and discuss a test’s clinical utility and predictive demand

For more on this project, visit www.accc-cancer.org/moleculartesting