

# ASSOCIATION OF COMMUNITY CANCER CENTERS

## INTEGRATION OF PATHOLOGY IN ONCOLOGY CARE LEADERSHIP SUMMIT

July 31, 2018  
Washington, D.C.

### EXECUTIVE SUMMARY



Association of Community Cancer Centers

# Introduction

The role of pathology in the diagnosis and management of cancer has changed in a new era of precision medicine and rapidly progressing cancer therapies. Advances in molecular biology, immuno-oncology, and targeted therapies require greater integration and coordination of pathology with the multidisciplinary cancer care team.

On July 31, 2018, the Association of Community Cancer Centers (ACCC), along with partners the Association for Molecular Pathology (AMP), the American Society for Clinical Pathology (ASCP), and the College of American Pathologists (CAP) held the Integration of Pathology in Oncology Care Leadership Summit in Washington, D.C. More than 60 multidisciplinary stakeholders participated (including oncologists, pharmacists, pathologists, genetic counselors, social workers, nurses, surgeons, service line leaders, and others) from hospitals, academic and community cancer programs, payer entities, patient advocacy groups, labs and diagnostic companies, and technology platforms. Participants came together to discuss how pathology fits within the cancer care continuum across various settings and what optimal conditions must exist for effective practices and patient-centered care. For a full list of summit attendees, visit [acc-cancer.org/pathology-landscape](http://acc-cancer.org/pathology-landscape).

The summit focused primarily on three topic areas: the state of cancer biomarker testing and molecular pathology, the diagnosis and treatment decision-making process, and policy and reimbursement issues. Through panel discussions, breakout group discussions, and interactive presentations, participants shared perspectives on the current state of pathology integration within cancer care and identified areas of opportunity where improvement on the status quo could be made. (Figure 1 illustrates the summit agenda.) As a group, summit participants reached consensus on seven of the most feasible and impactful opportunities for improving the integration of pathology with the cancer team and, working in breakout groups, identified next steps for taking action. What follows is a summary of the summit discussion of the current landscape, what improvements could be made, how the identified action items could help improve integration of pathology into oncology, and what actions we could be taking right now.

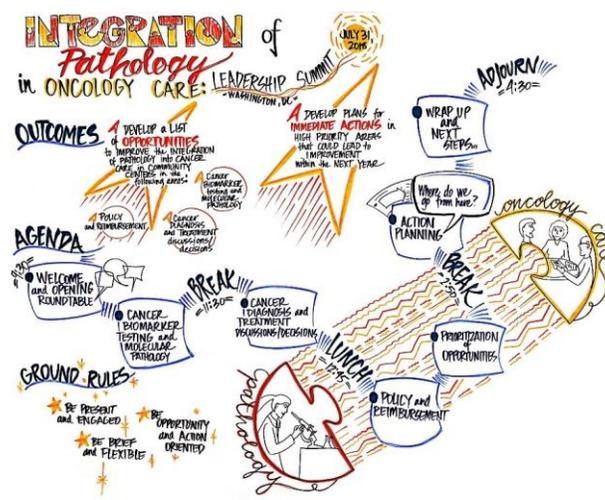


Figure 1. The summit agenda captured in a graphical recording.

## Empowering Pathologists & the Oncology Care Team for Culture Change

Prior to the summit discussion, in May 2018 ACCC conducted a survey that garnered over 600 responses to gain insight into the current landscape of pathology integration with oncology. Seventy-eight percent of survey respondents reported that pathologists attend the majority of their organization's tumor boards; 37 percent reported that pathologists recommend treatment options during these discussions. Only 14 percent of respondents reported that pathologists have one-on-one conversations with medical oncologists to discuss treatment recommendations. Less than half of respondents (43 percent) said that pathologists are authorized to order any type of biomarker test; while 34 percent reported that pathologists have authority to order only certain tests, and 5 percent reported that pathologists cannot order any testing. Survey results were then incorporated into an environmental scan prepared for summit participants, which looked at peer reviewed articles and conference findings from multiple sources, and as such is reflective of the current level of pathologist engagement in the discussion and decision-making processes behind diagnosis and treatment.

During the summit discussion, participants identified a number of factors contributing to the status quo, including healthcare silos, the view that pathology is ancillary to the cancer care team, lack of provider education on the role of molecular pathology, and lack of institutional process to keep pace with changing clinician roles.

Participants agreed that there is a need for a cultural change in both pathology and oncology. An opportunity to strengthen the pathologist's role in the cancer care team lies in empowering pathologists to become leaders and educators on the evolving importance of molecular pathology in cancer diagnosis and treatment. Now more than ever, pathologists have an opportunity to take an active leadership role in tumor board discussions, to educate on and lead biomarker test ordering, and to be recognized as integral members of the cancer care team. This cultural shift will require the engagement of existing local resources, regional chapters of pathology societies; professional organizations like the Association of Molecular Pathology (AMP), College of American Pathologists (CAP), and American Society for Clinical Pathology (ASCP); and the identification and recruitment of local physician champions. Together, these resources can offer clinical education on molecular pathology, guidelines, research, and more, but can also provide training on soft skills like leadership and communication. Leadership skills can be developed within model institutions and could become components of pathology residency programs.

## Standardizing the Testing Order Process

Testing is a complicated and fraught process. In the current landscape, biomarker tests may be selected and ordered by different providers, often based on the volume of tests requested. So, for example, medical oncologists may order testing for lung cancer and pathology may order for established, routine tests (e.g., breast cancer). Testing orders from medical oncologists may be insufficient in diagnosing a cancer; in some settings, pathologists may not be permitted to order certain tests due to interpretations of the Stark Law, and specialists performing biopsies may not be attuned to what pathologists need in order to conduct thorough testing. Lack of standardization in the test ordering process can lead to confusion surrounding the communication pathways for test ordering, repeated biopsies and testing, and delays in test results, ultimately hindering the cancer team from delivering the best possible care for patients.

Summit participants see opportunity in standardization of the testing ordering process for specific indications, thus enabling the cancer care team to provide high-quality cancer treatment across cancer types and tumor sites. With a standardized ordering process, oncologists, surgeons, specialists performing biopsies, and pathologists will know what tests are necessary, how much tissue must be procured, and how much time testing will take in order to deliver results and treatment options to patients. These guidelines can help cancer programs form a roadmap for testing, improve communication and decrease turnaround times. To track the process, a coordinated, centralized dashboard to track specimens and the testing process would be an asset. However, standardization regarding appropriate testing and reflex testing will require a nationwide effort based on evidence, participants concluded. To start, associations and societies can bring their resources together to identify and address gaps in standard operating procedure, lobby for testing coverage and reimbursement, develop sample reflex testing protocols, and categorize testing order protocols by disease state.

## Improving Specimen Management

When patients take the time to undergo diagnostic biopsies, they trust that their specialists will handle specimens appropriately and perform the right testing at the right time. However, summit participants noted that in current practice patients may need to get re-biopsied because those responsible for tissue collection may not be aware of the pathologist's needs across cancer types, tumor sites, and specific tests. Testing (and treatment options) should not be omitted due to a lack of quality tissue to work with, and patients should not have to go through multiple procedures due to an inadequate tissue sample. One of the most impactful things providers can do, commented one participant, is to treat every cell of a patient as precious.

Ensuring the adequacy and quality of tissue as well as satisfactory service to patients depends on developing a consistent, seamless specimen procurement and management process, participants agreed. Optimally, the process would begin with a pre-biopsy consultation between the pathologist and the provider who will perform tissue collection. In the current landscape, pathologists are being asked to do more with less tissue; therefore, constant communication between pathology and other specialties is increasingly critical to inform the proper management of limited tissue samples.

Opportunities lie in identifying and adhering to best practices and guidelines for obtaining specimens, with surgeons and specialized physicians such as pulmonologists and interventional radiologists receiving mandatory training to facilitate guideline compliance. Adherence could be tied to compensation as a means of enforcement. Nurses at the bedside and technicians who work in the lab also need to be aware of proper tissue handling and storage requirements, participants agreed. Further resources that could be utilized to standardize and streamline specimen management include the implementation of prioritization matrices by tumor type, specimen algorithms, a real-time dashboard of metrics related to tissue quality and quantity (e.g., the National Pathology Quality Registry), and protocols such as those provided by the American Society of Clinical Oncology (ASCO), College of American Pathologists (CAP), and others.

## Generating “One Pathology Report”

In the current landscape, coordinating and organizing all of the components of a pathology report is difficult, as data is housed in disparate locations, compiled in different formats, and written across differing levels of clinical expertise. Pathology and molecular diagnostic reports are often faxed to oncology providers and then attached to the patient’s electronic medical record (EMR) as PDFs. Diagnostic reports may be very long and contain information that medical oncologists may not use. Oncologists may not have the required expertise to read and interpret some of these reports, leading to frustration or liability concerns. Additionally, pathology reports are not prepared for consumers, so patients accessing their pathology report are likely to find the information incomprehensible and/or unusable rather than an aid to communication between patient and provider in explaining testing results and how these inform treatment decisions.

Summit participants strongly supported the potential of creating “one pathology report” for clinicians generated by standardizing data and language across specialties with the end-user in mind. Ideally, the “one pathology report” would be accessible across all specialties and all EHR systems; would allow for data mining to identify gaps; integrate artificial intelligence for interpretation, and be longitudinal, evolving over time. This would serve as a consistent way to collect and coordinate all relevant data, as well as determine levels of evidence and possible treatment options. Opportunities for developing a standard “one pathology report” start with leveraging professional societies and oncology organizations engagement in support of efficient, evidence-based, patient-centered care delivery. To begin, cross-specialty providers will need to define the elements of this report, which can vary across cancer type and tumor site, agree on the standardization of nomenclature, and identify indications of high quality. Next steps include mapping out current sources and locations of information and identifying a point person to coordinate aggregating required information. With the report structure determined and information sources identified, testing sites would be needed to standardize and establish the report as a best practice.

## Optimizing Virtual Tumor Boards

As reflected by the ACCC survey results, pathologists are currently underutilized at tumor boards. Summit participants agreed that in order to provide the best possible care for cancer patients, tumor boards would ideally incorporate all disciplines fully, including pathology. At present, however, pathologists are often not incentivized to attend or actively participate in these conferences. Payment in pathology is still based on work relative value units (RVUs) and performed procedures, so pathologists often go uncompensated for the time spent in tumor boards consulting on patient diagnosis and treatment options. When pathologists do attend, work continues to accrue in their absence. According to survey results, the number one barrier to pathologists’ tumor board participation was lack of time, followed by communication issues. As the pathologist’s role on the cancer care team has not historically been patient-facing, they have less direct access to patients and patient records, often leaving them underprepared for participation. Neither provider nor patient is properly educated on the role and importance of molecular pathology in cancer diagnosis and treatment, and pathologists are not currently incentivized to educate them.

One opportunity to encourage pathologist participation at tumor boards that summit participants endorsed is greater utilization of virtual communication platforms (e.g., video-based webinars), leveraging technology to accommodate the busy pathologists' schedules, eliminate a travel/scheduling burden for pathologists in different locations from providers, and more effectively and efficiently incorporate their expertise. Virtual meeting platforms would offer a convenient way for pathologists to educate other providers and care team members, and even include patients and families when appropriate. To fully integrate pathology would require a multidisciplinary mindset so that all tumor board participants are actively engaged in the discussion. Participants noted that this would necessitate a means to incorporate lab data, claims data, biobank data, and patient records so that all participants have access to the same information needed to wholly address each patient. To begin this process, it was recommended that electronic health record (EHR) vendors work on offering a platform for migrating and presenting this data in a new way, and sites must be willing to volunteer to serve as "beta" testers for this new approach. Pathologists often run information systems that are not connected with the outpatient or hospital EHRs. The lack of interoperability across systems prevents pathologists from accessing patient records and having access to vital information when making a diagnosis of cancer.

## Strengthening the Alliance Between Pathology & Genetic Counseling

Summit participants noted that a stronger alliance between genetic counseling and pathology could lead to improved care coordination, stronger patient advocacy and support, and greater communication between clinicians and patients. Participants envisioned a process in which genetic counselors conduct hereditary testing on patients and then discuss test results with pathologists as this information may impact somatic molecular testing decisions. Establishing an open line of communication between pathologist and genetic counselor may provide a pathway to more precise and informative testing and more definitive diagnoses. To strengthen the relationship between these two departments, professional societies representing genetics, genomics, and pathology would need to coordinate efforts to establish mutual goals. Communicating the importance of this opportunity to departments on the front lines of care, would be critical, participants agreed, as both pathology and genetic counseling are in high demand and short on time. Opportunities exist for pathology and genetics to collaborate on shared protocols, pathological interpretation, and division of labor, and in some cases pursue joint pathology and genetic counseling projects.

## Empowering & Educating Patients

All cancer care team members want patients to live better and longer lives. Advances in cancer diagnosis and treatment are helping make this a reality for many types of cancer. However, as cancer diagnosis and treatment decisions have become more complex, patients may find themselves in a position where they lack the perspective and knowledge to decide on their best course of action. Most patients do not adequately understand why tests are being ordered, how critical they are to proper diagnosis, what doctors learn from the results, and how they impact treatment options, participants agreed. Testing takes time, and patients who are concerned about the time constraints need to understand the value of this step in the care planning process. Without this information, the trust between patient and provider can erode, leading to increased patient expense, erroneously canceled testing, incomplete health records, and suboptimal care.

To alleviate this issue, participant consensus was that patients should be empowered with the knowledge and resources needed to ask the right questions, collaborate with providers on treatment, and ultimately make the best medical and financial decisions for themselves and their loved ones—right test, right treatment, right time. Patient-facing resources including checklists, frequently asked questions (FAQs), and pamphlets from patient advocacy groups are currently available. Participants agreed that additional resources on molecular testing, pathology reports, and how this information is used in cancer diagnosis and treatment may be incorporated into care. Clinical trial eligibility guidance, online learning modules, and caregiver/case management support are still needed. A patient-friendly version of the pathology report could be developed as an aid for clinicians in talking with patients about why the test was ordered, what the results show, and how the results impact treatment decision-making. To start, professional and patient advocacy associations should identify education gaps and opportunities for collaboration with the intention of providing patients with a central hub of educational resources. Best practices from model institutions can be identified by stakeholders and shared with patient groups.

## Other Areas of Opportunity

In addition to the seven opportunities detailed above, summit participants brainstormed dozens of other ideas to improve the integration of pathology into cancer care. Below is a truncated list of some potential action items:

### *Cancer Biomarker Testing & Molecular Pathology*

- A comprehensive, integrated, and accessible EHR to house discrete patient and testing data for pathologists and clinicians across care settings and disciplines
- Measuring effectiveness of national guidelines through regional assessment of treatment variability patterns
- Greater incorporation of pathologists into guideline-driven decision-making
- Improved coordination of companion diagnostics and testing criteria
- Engaging non-traditional stakeholders and payers to accelerate guideline incorporation
- A multidisciplinary “dashboard” to indicate progress and status during testing processes.

### *Diagnosis and Treatment Decision-Making Process*

- An electronic communication channel between pathologist and provider at all times
- Bringing pathologists into rounds with doctors and pharmacists, possibly during fellowship
- Improving pathologist access to patient records
- Mandating pathologist participation in tumor boards as part of accreditation
- Developing a precision oncology subspecialty to interpret pathology and act as an intermediary with medical oncology
- Regional multi-institutional tumor boards to boost the viability, credibility, and quality of community practices
- Enabling pathologists to be principal investigators for clinical trials.

### *Policy and Reimbursement Issues*

- Identifying a point person in each organization to retain working knowledge of reimbursement issues
- Having honest and open conversations about value and cost with patients
- Educating both healthcare providers and patients on next-generation sequencing (NGS) and the 14-Day Rule
- Lobbying for a more realistic implementation period of new CMS rules
- Compensating pathology for time spent attending tumor boards.

## **Conclusion**

With the exponential growth in our knowledge and understanding of cancer, improved communication and collaboration between oncology and pathology is critical. The goal of the Integration of Pathology in Oncology Care Leadership Summit was to identify actionable next steps for appropriate integration of pathology into the cancer care continuum. Engaged participants from of the all sectors involved in delivery of quality cancer care provided unparalleled insight into the ways in which professional and organizational processes and perspectives will need to become aligned so that providers can access, and patients can benefit from, ongoing advances in diagnosis and treatment. Through thoughtful discourse, participants clarified some needed next steps to address educational, technological, cultural, and communicative gaps between pathology and oncology. ACCC will continue to work with partner organizations to bring these action items to fruition.

Full summit proceedings will be made available in the near future.



Association of Community Cancer Centers

1801 Research Blvd, Suite 400  
Rockville, MD 20850  
301.984.9496  
acc-cancer.org

A publication from the ACCC education program, "Understanding the Landscape and Integration of Pathology with the Community Cancer Care Team." Learn more at [acc-cancer.org/pathology](http://acc-cancer.org/pathology).

The **Association of Community Cancer Centers (ACCC)** is the leading advocacy and education organization for the multidisciplinary cancer care team. ACCC is a powerful network of 24,000 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 [acc-cancer.org](http://acc-cancer.org) or call 301.984.9496. Follow us on Facebook, Twitter, and LinkedIn, and read our blog, ACCCBuzz.

This publication is a benefit of ACCC membership.

In partnership with:



This project is supported by:



Bristol-Myers Squibb

