

Standard of care hits close to home

Karen Titus

May 2013—Town versus gown: It's a long-standing source of tension in medicine. In November 1963, *JAMA* published a piece on the pathology of this so-called syndrome. The disease was characterized as both chronic and acute, with the author blaming social forces, the structure of medical practice, philosophical differences in medical education, and the rise of specialization, as well as a host of secondary etiologic factors. After much hand wringing, the author called for a renewal of spirit to end this classic divide.

Medicine was not blessed by a Great Awakening, as it turns out—unless you count the molecular revolution. The potent pairing of molecular diagnostics and targeted cancer therapies has helped erase the line separating town and gown. It's enabled smaller community practices to take advantage of cutting-edge treatments that are becoming the baseline of good care, such as *ALK* and *EGFR* testing for Xalkori and Tarceva, and *HER2* testing for Herceptin. As one oncologist puts it, the most up-to-date molecular diagnostics and treatment selection should be an everyday practice for everyone. "That *is* community medicine," says Randall Oyer, MD, medical director, oncology program, Lancaster (Pa.) General Hospital.

The speed with which these changes have occurred has further blurred the line. Certainly there are still cases where a community center might deliver care that is overruled, so to speak, when the patient subsequently seeks care at a second, academic center. But it's hardly a one-way pipeline filled with errors. "It's a learning curve for everybody," says Shuko Harada, MD. "It's not necessarily that the community hospital doctor is wrong. Everybody is still getting consensus on what test needs to be done for what patient," says Dr. Harada, assistant professor and head of molecular diagnostic laboratory, and director, molecular genetic pathology fellowship program, Department of Pathology, University of Alabama at Birmingham. In that sense, denizens of both town and gown are migrating to a sprawling exurb, one filled with intellectual wealth but a slightly disorienting layout.

Geography has historically had an outsized influence on patient care. While large academic centers have traditionally offered the most advanced testing and treatments, that's not where most patients actually cluster. "We have to understand that the vast majority of patients are right here in the community," says Pranil Chandra, DO, director of molecular pathology services and interim medical director, clinical pathology, PathGroup, a Tennessee-based pathology group.



Weekly molecular meetings with his team is one way Dr. Chandra (right, with oncologist Dr. Spigel) works to maintain gown-level care—as it relates to molecular pathology—across multiple towns. [Photo:

Yet for years, that was an operating structure in medicine. The past four decades gave rise to 40 National Cancer Institute-designated comprehensive cancer centers in the United States. A laudable achievement, to be sure, but one that didn't fully address a stark fact: 85 percent of patients with cancer receive treatment in the community, says Dr. Oyer, who is also a member of the board of trustees for the Association of Community Cancer Centers and of the advisory board for an ACCC study looking at molecular testing in the community oncology setting (www.accccancer.org/education/pdf/MolecularTestingGatefold.pdf).

A shift in thinking was in order. Instead of trying to get all patients to NCI-designated centers, Dr. Oyer says, the goal became to shift NCI-style care to the communities. That was the genesis of the NCI's Community Cancer Centers Program, which launched in 2007.

Against this changing backdrop, what is the current state of town-gown relations? How well is care being delivered in community settings? Is the town-gown moniker still relevant?

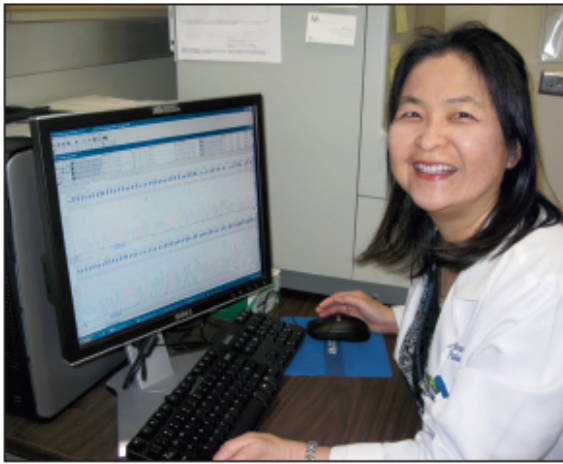
"Town-gown is always a useful label, because there is always pushing and pulling between academic medical centers and the practicing physicians in the field," says former *JAMA* editor George Lundberg, MD, who's now editor in chief of CollabRx (www.collabrx.com), a San Francisco-based data analytics company. "But it's important not to generalize." In some places, the conflicts are strong; in others, they don't even exist.

For all the advances and high hopes, differences in care are real and persist to a distressing degree. It's not strictly a town-gown issue, though that can't be overlooked as one influential element.

A study presented at the Society of Gynecologic Oncology annual meeting in March, for example, found that only slightly more than one-third of patients with ovarian cancer receive optimal treatment. The reason? Most patients are seen by physicians who see few cases of ovarian cancer. Less experience, less expertise, lesser care.

In the study of 13,321 women, 37 percent received care that followed National Comprehensive Cancer Network clinical practice guidelines. Surgeons and hospitals who saw more patients with the disease were more likely to follow the guidelines than those who saw fewer cases (surgeons with 10 or fewer cases; hospitals with 20 or fewer). As the study noted, women are 30 percent less likely to die of this disease if they have guideline-recommended treatment.

Care disparities are not limited to ovarian cancer. David Spigel, MD, program director for lung cancer research, Sarah Cannon Research Institute, and an oncologist with Tennessee Oncology (where he also directs the phase II/III clinical research program), sees discrepancies in lung cancer testing. At his hospital, in Nashville, he's fortunate. Thanks to reflexive testing for *EGFR* and *ALK* (among other things), he typically has molecular testing results available when he talks to his patients. "But at some of the other facilities in the region, including the more rural areas of Tennessee, that isn't done at all." Tennessee Oncology is a practice with 75 medical oncologists and hematologists serving middle Tennessee, Chattanooga, and northwest Georgia.



Dr. Harada at UAB: “Everybody is still getting consensus on what test needs to be done for what patient.”

Dr. Spigel benefits from having a large research network—his center is heavily invested in qualifying patients for clinical trials, so unlike some of his colleagues from rural or more isolated clinics, he has the advantage of interacting with colleagues around the country who work in larger practices. “In places where somebody has seen an *ALK* rearrangement once a year or once every two years, it’s hard to get comfortable with the idea of testing, much less how to use the medications.” That’s true even for more established molecular tests and targeted therapies, he says, such as *HER2* testing.

It seems hard to believe. Or, as Dr. Spigel puts it, “Shouldn’t this message already be known? Yes.” But messages need to travel and sink in, and it’s not a swift journey. Every meeting, article, guideline, tumor board, panel, and discussion “sparks new and repeat conversations of the importance of testing, and what to test, and how to do it,” he says. “Even at large, busy urban centers, like where I work, we’re not immune to these challenges.”

There’s also the complicated reality of how people seek care, and how their physicians respond.

As the ovarian cancer study showed, there were women who did not receive surgery from gynecologic surgeons (as recommended) because they preferred to receive care from their current physician—the obstetrician who delivered their children, for example.

“It’s usually not the best choice,” says James R. Jett, MD. It’s frequently less a choice than a mind-set, he goes on to say. “I know people who are like that. They had one GP and they love him or her and don’t venture outside of that,” says Dr. Jett, professor of medicine, National Jewish Health, Denver.



Dr. Oyer

On the other hand, GPs can and do push back against that way of thinking. “I think a lot of those GPs nowadays will say, ‘I’m not the best one for you. Go to this center or that center to get the next level of care,’” Dr. Jett says. GPs are more comfortable referring in part because the rapid changes in medicine make it impossible for any one doctor to know everything; 30 years ago, physicians might have been more confident in the breadth of their knowledge, he suggests. Then, too, physicians practicing today are accustomed to specialization, in training and in care.

Nevertheless, he says, a wide gap remains in thoracic surgery for lung cancer cases. Patients in a community setting are more likely to be operated on by a general surgeon who doesn't do many cases a year, he says. Those patients should be encouraged to travel to a large center. They don't always make that journey, however. The reasons can be hard to untangle.

"Quite honestly, sometimes patients don't like to travel," Dr. Jett says. "It's hard to know how much of that is driven by the patient. Sometimes people, especially older individuals, who live in small towns are petrified at the idea of driving into a big city."

Moreover, not all patients are able or willing to ask the questions that might funnel them to the best care. "Medical knowledge by the general public is not real high," says Dr. Jett, noting that the Internet remains a double-edged sword.

"On the other hand, how much is driven by the doctor saying, 'Oh, we can do that locally'?" he asks.

In many cases, of course, community physicians can handle matters locally.

Dr. Chandra takes a broad perspective, literally. PathGroup, based in Nashville, Tenn., is a physician-directed, privately held group of more than 70 pathologists. It serves an area within a nearly 500-mile radius of Nashville, from northern Indiana to southern Alabama and North Carolina to Arkansas. PathGroup provides molecular diagnostics for patients from community-based medical oncology and hematology practices and at the more than 70 hospitals where the group's members serve as pathology medical directors. "We are purely a community-based practice," Dr. Chandra says.

That's plenty of towns, in short. Dr. Chandra's mission is to maintain gown-level care—as it relates to molecular pathology—in all of them.



Dr. Jett

To bring the right tests to all these practice sites, Dr. Chandra and his team discuss tests at weekly molecular meetings. When they decide to add a new test, it's based on recommendations from groups such as the NCCN, CAP, and American Society of Clinical Oncology; input from pathologists at PathGroup; and market demand, among other considerations.

Dr. Chandra, a molecular oncologic pathologist and hematopathologist by training (at MD Anderson Cancer Center and NYU Langone Medical Center), puts together a list of recommendations and guidelines, which he distributes to the group's pathologists and medical directors. It's less a matter of him telling his colleagues what to do, he says, and more of him sharing what, in his opinion, are the best clinical molecular practices. From there, he says, each medical director has to decide—ideally in concert with his or her clinical colleagues and executive leadership—whether and how to add a new test.

"I encourage pathologist-driven testing, and encourage the testing to be done reflexively," Dr. Chandra says, citing *EGFR* and *ALK* testing as an example. But he's well aware that every institution is different and will have its own approach to implementation. "In central Tennessee, where we implemented reflex testing over a year ago, we've agreed that we want to do reflex testing of *EGFR* and *ALK* on all nonsquamous, non-small cell lung cancers. But there are other institutions where the oncologists want to make that decision. You have to be mindful and respectful of that," he says.

That highlights one of the key issues in bringing standard care to all practices—it's never a given, even when everyone belongs to the same group. Here medicine has taken a page from the European Union. Every institution wants to make its own decisions, cherishing its own autonomy despite its collective bent.

"I thought it would be easy to standardize testing across the board," Dr. Chandra says. He quickly learned otherwise.

Such heterogeneity is typical in health care, says Lee James, MD, PhD, a medical oncologist, a senior medical director at Pfizer, and team leader for Xalkori. Differences are regional, demographic, and stylistic. Uniformity is as attainable as consensus on the federal budget. But, says Dr. James, there should be a baseline for what "good" looks like.

Getting to that baseline takes education, pure and simple.

Community practice oncologists may not have the same knowledge as those who practice in cutting-edge academic medical centers, Dr. Chandra says. That means pathologists have a responsibility to educate physician colleagues on standard of care. "It's very time-consuming," he acknowledges. "But it's extremely important."

Oncologists aren't alone in their knowledge gaps. At one time pathologists may have found it reasonable to leave treatment matters strictly to oncologists. But that no longer works, says the UAB's Dr. Harada. "We all have to keep up," she says. "That's the best way to tell oncologists whether a test request is reasonable." Moreover, she adds, oncologists receive sales pitches from diagnostics makers and reference labs. Unless pathologists are up to date about targeted therapies, she says, they won't be able to help oncologists know whether those tests are worth considering.

Dr. Harada suggests that current residents are more likely than more established physicians to be aware of current treatments, though she takes pains to say she doesn't want to sound critical of her pathologist colleagues.

One pathologist who is less concerned about sounding critical is Dr. Lundberg. In a video editorial (www.medpagetoday.com/Columns/At-Large/36944) he posted in January, he goaded pathologists to become "knowledge engineers" in molecular testing as opposed to "shipping clerks."

Oncologists stay on top of treatment options "very, very well," Dr. Lundberg told CAP TODAY. That's not as true for pathologists. "I hear from local oncologists that their pathologists are often not helpful," he says. An oncologist might ask for guidance on a patient who has a certain mutation, for example, and the pathologist replies he or she has never heard of it. "I weep—metaphorically, of course—when I hear that. Because that's a shame." When pathologists come up short, oncologists will turn elsewhere for assistance, including places that transcend the town-gown paradigm. Dr. Lundberg cites his company, CollabRx, as an example. It blends molecular oncology and diagnostics information with artificial intelligence and medical experts to help providers interpret results and guide decisions. Oncologists are the biggest users of CollabRx apps, Dr. Lundberg says.

Pfizer's Dr. James takes the middle ground. Oncologists may have more knowledge about treatments, he says, but pathologists have a better handle on what tests work and whether they belong in a particular practice. As long as one of these physicians leads molecular discussions, he's happy. You need a champion, he says. "But it's less critical who that champion is." He's seen successes with both models. The worst-case scenario is easy to spot, too. "It's when neither of those people is engaged."

Sometimes the best source of education is the most old-fashioned: tumor boards. Technology, as well as molecular advances, has breathed new life into these gatherings.

Lancaster Hospital, where Dr. Oyer practices, has an academic partnership with the University of Pennsylvania. Pairings such as this make it easier for community cancer centers to follow and adopt new developments from academic centers, as well as to obtain second and third opinion consultations and access to highly specialized services. At Lancaster and Penn, electronic connections between the two have transformed tumor boards, letting physicians from both places look at slides, talk about tests, and discuss standard treatments as well as new

research.

Tumor boards are crucial, Dr. Spigel agrees. “At least at my center, that simple kind of venue has led to a sea change in how we practice,” including reflexive *EGFR* and *ALK* testing, he says. But physicians need to build on tumor boards. “This idea that we’re in a separate part of the cancer center and that we only see each other at tumor boards is not realistic.” Pathologists and oncologists need to talk about patient management daily, he says.



Pathologists and oncologists need to talk about patient management daily, says Dr. Spigel, left, with Dr. Chandra. “This idea that we’re in a separate part of the cancer center and that we only see each other at tumor boards is not realistic,” he says.

Dr. Chandra, too, is a fan of tumor boards, as well as of educational seminars. He’s given plenty himself and finds he learns from them, too—specifically, where the knowledge gaps are. At a recent seminar he gave, he says, the audience knowledge of molecular testing was all over the map. “It was very new to some physicians,” he says.

Clearly, some small practices have found ways to circumvent the limitations of small practices. Both involve attachments, either with a large academic center or through consolidation. Small, unattached practices face a tougher road, and it’s here that the traditional town-gown divide may be strongest.

Pfizer’s Dr. James traces it to physician experience. It’s a matter of volume. Community physicians tend to be less specialized—they may see a lung cancer case followed by a breast cancer case followed by a colon cancer case. In large academic centers, on the other hand, physicians may be thinking more broadly, not just about currently available tests and drugs but also what might be available via clinical trials.

For Dr. James, the biggest help comes from guidelines. The recent lung cancer guideline, for example (see “New guidance on lung cancer testing,” *CAP TODAY*, April 2013), addresses physicians in every type of practice, who experience every type of volume, and establishes a basic level of care for all.

He also sees an almost natural growth to how information spreads. Almost all patients with breast cancer are getting a *HER2* test, he estimates; that’s also the test that’s been around the longest. *EGFR* and *ALK* testing for lung cancer may be happening in only 60 percent of patients, he guesses. But the lung cancer community is learning from the *HER2* experience, particularly the need for standardization based on evidence and the need for routine testing. “That’s why there’s so much emphasis now being placed on guidelines,” Dr. James says.

Groups such as the NCCN, CAP, and ASCO are also critical, he says. (Dr. Lundberg agrees. “Physicians tend to change as groups rather than individuals,” he says.)

There are always early adopters, Dr. James notes, regardless of whether they’re in a community or academic setting. What separates mid-level from slow adopters? Dr. James attributes it to a willingness to be open to guidelines.



Dr. James

But an open mind can't close the volume gap. "There are probably practitioners who know about Xalkori and know about *ALK* positivity and are looking for that first patient they can treat," says Dr. James. The math supports him: Only about four percent of patients with lung cancer have an *ALK* translocation, so physicians may have to test plenty of cases before they encounter an *ALK*-positive sample. "Sometimes that waiting can be frustrating."

That brings Dr. James back to the importance of guidelines and routine testing. "You know you're not going to leave any patients behind," he says. Otherwise, the one time a physician fails to order the test could be the one case that's *ALK* positive. He also likes the potential of EMRs, which can link physicians to guidelines, pathways, and evidence and prompt them to consider tests and other steps they might otherwise overlook.

Dr. Jett has spent his life practicing in larger settings. Before arriving at National Jewish Health, he spent three decades at Mayo Clinic. But he's familiar with practices in community settings, in part because he makes a point of finding out what goes on in them. He and his colleagues at National Jewish give medical grand rounds at community hospitals and occasionally attend their tumor boards. Again, it's simple, and it works. "It's just honest discussion of the science and state-of-the-art treatments." It makes subsequent discussions easier, too. After he gives grand rounds at another site, says Dr. Jett, physicians feel much more comfortable calling him to ask about a case.

There's also opportunity for discussions when a physician sees a case that he or she might have handled differently from the referring physician. "Sometimes we see an operation that we think is less than optimal," says Dr. Jett, "where they haven't adequately sampled and staged the mediastinal lymph nodes."

How do physicians handle those conversations? "Um, it's always difficult," says Dr. Jett. He's used to it from his experiences on tumor boards, where there's plenty of discussion, and often disagreement, over what to do. "The problem is, a lot of people who are not doing state-of-the-art treatment aren't going to tumor boards for discussion. Obviously, you don't send a letter to a physician you don't know, at another hospital, saying, 'You're not up to speed.' That sort of policing and education needs to come from within that institution."



Dr. Lundberg

He recalls a situation many years ago when one of his patients did not have adequate sampling of the mediastinal lymph node—the procedure was done by a cardiac surgeon rather than a cardiothoracic surgeon who specialized in cancer. Dr. Jett's response was to stop referring patients to that physician—an easy decision, since he had the luxury of many options at Mayo. At smaller institutions, there may be no other choice.

This touches on a topic few physicians want to talk about: What if physicians don't even know, or want to admit, a gap exists in their knowledge? How do you pluck them from that river called denial?

Dr. Spiegel offers a glimmer of hope to go along with a stark assessment. "Nobody wants to feel like they don't do things in the best possible way at their center," he says. "I'm the same way. If I'm listening to somebody talk and

they say, 'Here's the way you should practice,' I don't like to hear that. Because immediately there's going to be a scenario where I didn't practice that way. And I think I've been practicing good care. I don't like somebody suggesting that I haven't been.

"But whenever I'm having a discussion with different tumor boards or different centers, there's often a feeling that more can be done," he continues. "That's a good thing. It sparks discussion about how to change what's happening. I think sometimes there's a light bulb moment where people appreciate that there's gaps in their program. The nice thing to see is it's not too late to start to change things."

There's a negative and a positive way to educate, in other words. "And in some ways you're not going to have a choice, right?" Dr. Spigel says. "Insurance companies are going to require you to have proof of a certain result before you can prescribe a certain pill."

Physicians are slow to change behavior, a trait both good and bad. Medicine is no place for a wing and a prayer. Tests and treatments, no matter how promising, don't belong in clinical practice until evidence proves they work. On the other hand, says Dr. Jett, "It's always easier to do what you've done in previous cases." That's why knowledge must be shared: "Doctors out there practicing need to know that things have changed," he says. "What we're doing in lung cancer now is not what we were doing five years ago. So if your knowledge is five years old, you're behind in how you think about these things."

He also thinks there's a role in playing on physicians' natural competitiveness. "If you showed me I was performing significantly under the average, you can bet that would be motivation to change," says Dr. Jett. "If you get a report card from the lab saying, 'On the last 10 cases of lung cancer you saw with adenocarcinoma, you got *EGFR* testing one time, and on average your colleagues got it seven or eight times,' that would be a wake-up call."

The solutions to closing the town-gown gap, then, are big as well as small, perhaps a fitting answer for a gap that's both big and small.

For patients, however, the payoff will always seem big. Dr. Spigel recounts a letter he received recently from the husband of one of his current patients. The husband sent the letter to a colleague at an academic medical center as well as to Dr. Spigel, commenting on an advanced therapy his wife had received. The letter read, in part, "We feel like we're getting state-of-the-art care in our hometown."

It was a gratifying letter. Patients in community settings deserve such care, says Dr. Spigel. More importantly, he adds, "It's something they should actually be able to get."□

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