Labs hunt for solutions to staffing, plastics, and blood supply shortages

January 2022—"Still a pressure cooker and hotter now" and "grim." Two comments that describe where some states were on Dec. 7 when Compass Group members met for their monthly call on COVID-19 and more—and this was before omicron spread in the United States. Supply chain remains unreliable (pushing utilization efforts into high gear in at least one lab), and the staffing shortage is "bad and sliding to worse," says John Waugh of Henry Ford Health System. Blood is in short supply too.

The Compass Group is an organization of not-for-profit IDN system laboratory leaders who collaborate to identify and share best practices and strategies. Here is what they told CAP TODAY publisher Bob McGonnagle a few weeks before 2021 came to a close.

We have another new variant, omicron, but we're sorting out what it's about, and at the same time there seems to be a spike in the delta variant, particularly in the Northeast. Jim Crawford, tell us where you stand in New York City.

James Crawford, MD, PhD, professor and chair, Department of Pathology and Laboratory Medicine, and senior VP, laboratory services, Northwell Health, New York: I've used the metaphor of a pressure cooker for a long time. Well, it's still a pressure cooker and it's hotter now. Our positivity rates at Northwell and in the region, including in Long Island where our core lab is located, are hotter than they were two to four weeks ago. Our hospital admissions remain under control.

The New York State SARS-CoV-2 Testing Consortium will meet today. I am using the drum I have to advocate for our workforce. It's time to find out what New York State's capacity is for educating and certifying laboratory technologists, and I'm beating the drum as hard as I can. We're having a hoedown today with New York educational institutions and other high-ranking people at the state level to see what we're capable of, if we're truly going to address this crisis.

Dwayne Breining, can you say anything yet about the omicron variant? It seems to be highly infectious like delta, and yet I've seen reports going both ways as to the severity of what might happen.

Dwayne Breining, MD, executive director, Northwell Health Laboratories, New York: The initial news is encouraging on the clinical course, but the sample size isn't big enough to draw firm conclusions. The degree of hospital admissions and particularly oxygen dependency is not paralleling the increase in infections.

I think everybody has affirmed now that their diagnostic PCR test will detect omicron as well as the other variants. We're waiting to see if there is any impact on the therapeutic effectiveness of the monoclonal antibody treatments, as well as the vaccine penetrants. We already know delta can cause a number of breakthrough infections, although the vaccine mitigates the clinical course. Hopefully omicron is the same because it has shown breakthrough infections, even among people who have been fully vaccinated and boosted. To date, the cases we know of seem to be clinically mild.

Stan Schofield, when we got together last month you indicated there was a great rise in cases, and I've seen subsequently that it's getting worse in many parts of New England. What's the report from NorDx?

Stan Schofield, president, NorDx, and senior VP, MaineHealth: It's fairly grim. There are 20 ICU beds available in the state; there are three ICU beds within MaineHealth. There are seven to 10 non-ICU beds available in MaineHealth. Every hospital has cut back almost all elective cases. I have significant staff outbreak. We swabbed 580 employees yesterday at our big academic medical center. We're running about 14 percent positives for our patient population. A third of the people in the ICU are fully vaccinated patients. We test at urgent care centers in New Hampshire, and the positivity rate is 26 percent.

We're down from 26 patient service centers to 10—and we can't quite staff the 10—and some days we're down to seven. There's no access, and for people in an outpatient setting who want routine lab work, it's a big problem. We're looking for more point-of-care devices. I am in discussions with three companies. We're trying to get evaluation kits and run an evaluation this week.

We continue to have supply-chain challenges for Vacutainer tubes, needles, butterflies—everything that is a consumable. Anything with plastic in it is a challenge.

Against this backdrop of severe labor shortages, staff burnout, nursing burnout, could we be in for a winter as tough as some we've known in the past two years?

Stan Schofield (NorDx): Worse. I'm probably down 20 percent from a year ago. I have 71 open positions today out of 500. We can't get anybody to come in at an entry level. I have 20 slots for phlebotomy training class. I'm paying \$18 an hour to train them and I have two people who have accepted. We're talking about premium pay everywhere just to get people to work the weekends, and we are being raided every day by diagnostic companies. From a staffing standpoint it's the worst I've seen in my career, and it's much worse than it was a year ago.



Dr. Laudadio

Let's switch geographic gears to Little Rock. Jennifer Laudadio, what is your situation there?

Jennifer Laudadio, MD, professor and chair, Department of Pathology, University of Arkansas for Medical Sciences College of Medicine: Things are pretty good. Our vacancy rate is where it was pre-pandemic. In terms of infection rate, it is creeping up a little higher than what we saw pre-Thanksgiving, but not to the levels we were seeing in August and September, when we had our delta surge.

Stella Antonara, tell us about your situation at OhioHealth regarding the virus and supplies.

Stella Antonara, PhD, D(ABMM), medical director of microbiology, OhioHealth: We have reached 16 to 17 percent positivity rates systemwide, and there are predictions this will get higher as we go into the holidays.



Dr. Antonara

We are seeing supply shortages like everyone else. When it comes to our point-of-care testing, we are doing okay for now but it's a challenge. We're in constant communication with the vendors we use in our system just to have as many vendors as possible so we can serve the need for testing. We had to adjust our testing algorithms a few times throughout the past two years, but we're stable now.

Last year the flu was a nonevent and there is hope it could be a nonevent this year. John Waugh, what are you seeing in Michigan?

John Waugh, MS, MT(ASCP), system VP, pathology and laboratory medicine, Henry Ford Health System, Detroit: Flu in Michigan is light now. There was an outbreak at the University of Michigan in Ann Arbor, and the CDC sent a team to take a look at that. But I just looked at our weekly report and it shows very sparse flu in Michigan.

We're continuing to be worried about COVID. In Michigan in July, we were at about 2.5 percent positivity, and we peaked last week at 22 percent. As number one in the U.S. our good news for this week is we've slipped to second place. Today it's at 20 percent positivity. About a third of our symptomatic ED patients are testing positive, and for our own employee group who are symptomatic, about 17 percent are testing positive.



Dr. Waugh

What is your labor situation?

John Waugh (Henry Ford): It's grim. It's bad and sliding to worse as we get toward the holidays. We've had agency temporary people come onboard at pricey hourly rates. A number of those companies are coming back and saying they need to negotiate their rates back up again. So for situations where we have good staff, we're okaying those increases, but we built into the contract that we can slide back if the labor situation improves.

Let's stay in the Midwest and go to Clark Day. What's your situation now?

Clark Day, VP of system laboratory services, Indiana University Health: We have noticed an increase in positivity in Indiana, up to about 15 percent in recent weeks. We do not have supply issues. We have on hand a month to two months of the testing supplies to support our collection locations. The manufacturers are saying no constraints on the PCR-based testing. Our big effort—and we've been working on this for months—is to prep for testing our own unvaccinated team members, and that's a big logistical challenge. About 10 percent of our 36,000 team members are exempt from vaccination, so they'll need to be tested. We're also trying to serve the community by offering that capability to some employers in the marketplace who might not know how to coordinate this for their employees. That's assuming the requirement goes through. At IU Health, we will likely test our team members whether it's a requirement or not.

Let's turn to California. Mike Quigley at Scripps, do you have better news for us?

Michael Quigley, MD, PhD, vice president, diagnostic services, Scripps Health, San Diego: We have labor shortages and they're our biggest concern. One of the five hospitals in our system is most affected; we are using staff from other facilities to cover. While staffing at other hospitals is tight, we're doing okay using overtime and casual labor.

We're hearing about shortages across the board and even pathologists are in short supply according to some of our sources.

Dr. Quigley (Scripps): One of the thoughts that occurred to me earlier in this conversation is how many people my age are thinking about this being near the end of their career too. Another year like '21 would probably push some of our pathologists to consider retirement in 2022.

Ian McHardy, tell me about the COVID situation at Scripps.

Ian McHardy, PhD, D(ABMM), director, microbiology, molecular, and immunology laboratory, Scripps Health, San Diego: We reached a baseline that was much higher than previous baselines in terms of positivity. We're sitting around four, five, sometimes six percent, but that's not causing too much problem for our hospitals yet. Overall we're doing remarkably well given what's going on in the rest of the country.

I'm not aware of any omicron in San Diego. We continue to collect samples for sequencing, but we don't necessarily send them for immediate sequencing as they do in New York, for example. There will probably be a delay in terms of reporting when it does hit San Diego. It's already in L.A., so if it's there, I'm sure it's here.

How is your supply chain holding up?

Dr. McHardy (Scripps): It depends on where we're looking. If you look in our chemistry department, our vendor has

been unable to supply critical elements for us. We've already had to make big exceptions in terms of holding specimens and waiting for reagents to arrive before we can perform testing.

For COVID testing we're doing fine. The vendors learned the lessons early in 2020 and early 2021 to make as much as possible, so we're doing okay there. But with plastics and random things, we'll find out on any given day that suddenly we can't get group A strep cartridges, for example.

Let's head up to Sacramento and to Dhobie Wong at Sutter Health.

Dhobie Wong, MBA, MLS(ASCP), CLS, VP of laboratory services, Sutter Health, Sacramento, Calif.: For our testing, we're seeing regional variation in our positivity rates. For the San Francisco Bay Area, which is highly vaccinated and has a lot of masking and other restrictions, we have a 2.6 percent positivity rate, whereas in the Sacramento Valley we have fewer vaccinations and we're seeing an 8.3 percent positivity rate. We do about 3,000 tests daily in the acute and ambulatory setting, and with that testing we are also seeing an increase from last year for our flu rates.

In terms of staffing, we have a little over a 10 percent vacancy rate at all of our facilities, and in addition to that we're seeing a lot of leaves of absence.

We have a meeting today with our executive lab leaders to talk about our supply chain because we have periodic disruptions. Looking at the root causes and trying to establish that lead time, we're finding most of our vendors need a 25- to 28-day lead time. We have relied on just-in-time managing of our supplies. So we're having to reevaluate our process to contend with those extended lead times.

Do you anticipate the supply chain and staffing problems will lead to more severe restrictions in terms of what you can offer in the Sutter labs now?

Dhobie Wong (Sutter Health): Yes, we're anticipating that. We're trying to find different solutions, but the future isn't looking bright in those areas.

Let's go to the Southwest, to Dallas. Joe Baker, bring us up to date.

Joseph Baker, VP of laboratory, Baylor Scott & White Health, Dallas: Our positivity rate remains around seven percent. We haven't seen omicron at this point. We have two facilities that can do that testing—our Baylor University Medical Center flagship in north Texas and our Temple facility in central Texas. They're continuing to screen anything that might have an S dropout.

From a supply-chain standpoint and a testing aspect, there have been minimal limitations because our volumes have dropped. We're no longer testing preprocedural patients, although we are preparing for flu season. On the specimen collection side, our big supply-chain problem the last couple of weeks was around tourniquets, not having enough supply.

Our staff vacancy rate is around 11 percent. We have about 180 open positions within our system, which is significant. About 85 percent of those are full time or part time. We're putting together plans to develop our own training programs. We're having more conversations with our community colleges and our school districts to see if we can tap into the vocational avenues they have. Maybe we can have a pipeline into our phlebotomy and laboratory tech areas.

How long do you think it would take for those activities to make a difference in your pipeline?

Joe Baker (Baylor Scott & White): They can make an almost immediate difference. The problem is that we have to find a person within the system to coordinate these efforts.

Since we're down South, let's go to New Orleans. Greg Sossaman, what's it like in New Orleans?

Greg Sossaman, MD, system chairman and service line leader, pathology and laboratory medicine, Ochsner Health, New Orleans: We're not seeing the same kind of COVID issues because we are still able to be outside here and enjoy the weather. We had our surge in the August–September time frame. We're still testing 2,000 to 3,000 samples a day. A lot of that is for the state; we have a contract to provide testing. The positivity rate is in single

digits, but it varies throughout the state. Our flu positivity rate is about 12 percent now within the system. We're seeing a good amount of flu A.

Our biggest challenges are personnel challenges, and it varies. In blood bank and microbiology, we're terrifically challenged just to get agency in those areas. And the supply chain is problematic. We're on allocation from our main supplier now for tubes, to the point that we're focusing on utilization efforts—putting additional rules in the EHR, canceling the ability for physicians to order things Q day and have them go on forever. We talk here about never letting a good crisis go to waste, so we're pushing utilization more than ever. The news around the allocation seems like it will be going on for many months, so I'm not sure how much relief we'll see with plastics in the short term.

You're a member of the Clinical Laboratory Improvement Advisory Committee, and CLIAC has an important advisory role to play—is this staffing difficulty being heard in the CLIAC circles?

Dr. Sossaman (Ochsner): I brought it up at the last meeting and other people have spoken about this. We have a workgroup forming to look at different aspects of updating some of the CLIA regulations, and part of that is around personnel standards. It won't help us in the near term with staffing shortages, but there are things we can change in CLIA to help future staffing shortages. There is an awareness.

Would you personally favor modifications to CLIA that would make it easier to bring people into the laboratory to make important contributions?

Dr. Sossaman (Ochsner): I would, and there are already people who participate in different areas of laboratory testing, like embryology, that aren't covered under CLIA now. Several aspects need to be looked at and changes made to accommodate additional personnel areas within the laboratory.

Sterling Bennett, we've been struggling with staffing shortages for years. Are we going to reach a critical mass where there is a national effort, probably through the government, to help us?

Sterling Bennett, MD, MS, senior medical director, pathology and laboratory medicine, Intermountain Healthcare, Salt Lake City: I sure hope so. We've been talking about staffing shortages for decades but we've always managed to get by. Over the past six to eight months, things have been materially different—more openings, fewer applicants, and no relief in sight. I'm not sure what will happen unless we get a slight downturn in the economy and people want to come back into the workforce.

What is Intermountain's experience now with COVID testing?

Dr. Bennett (Intermountain): Last month we were on a plateau with COVID, which has continued since the third week of September. Our positivity rates have been steady in the 12 to 13 percent range for that time. Our number of tests on a seven-day moving average looks pretty flat.

One area that hasn't come up that is probably impacting other people is the stability of the blood supply for transfusion. We received notice a month or so ago from the American Red Cross to anticipate blood shortages throughout the winter months. I was at the donor center in Salt Lake last week and the individual I talked with said they are running at about half their staffing level because they can't find people. Even if we were to mobilize a lot of donors, they don't have the staff to increase collections, and that's concerning to us.

Steve Carroll, what does your blood supply look like in South Carolina?

Steven Carroll, MD, PhD, chair, Department of Pathology and Laboratory Medicine, Medical University of South Carolina: We're hearing some of the same things that Sterling is hearing. My blood bankers have come to me with concerns. We've been trying to diversify who we're getting blood from. We've been relying primarily on American Red Cross, but we're turning to Blood Connection and other outlets so we can get blood from them when the Red Cross can't supply it. That has been slowly gathering steam, and it crept up on us because we've been preoccupied with other things.

What is your COVID situation now?

Dr. Carroll (MUSC): Our testing positivity is running about 4.5 percent. We are still sequencing a large number of isolates every week. As of our last sequencing run, it is 100 percent delta and delta-like. In the Charleston area our

vaccination rate is only about 53 percent. I expect when omicron hits we'll see a nasty spike.



Dr. Carroll

I am now working with the National Courts and Sciences Institute, which is educating judges on the science behind COVID because they have so many cases hitting their agenda and they need advice on how to figure out what constitutes a good expert witness. I expect they're having shortages in that area. We have a vaccine mandate here, but we have a bolus of people who have filed for various kinds of exemptions and they have not made it through those. Some of the people in that group have indicated if they don't get their exemption, they're going to court.

Tell us what you're thankful for now as you look toward the end of the year and the new year.

Dr. Carroll (MUSC): I am thankful for this group. Sorry, but it's good to hear that other people are sharing our misery.

Dwayne Breining, tell us something you're thankful for.

Dr. Breining (Northwell): I'm thankful I've been able to weather this with laboratory people. People who are used to working behind the scenes in any crisis are used to being short staffed. They don't need accolades to perform, and they know they're doing important work.

John Waugh, what are you grateful for this time of year?

John Waugh (Henry Ford): For the most part, all of us and the families of our team members are healthy and well, and our team members have received recognition for the extraordinary work they've done over the past 22 months. I'm grateful for their loyalty, and I'm fortunate to work with so many talented people, including all of you.

Greg Sossaman?

Dr. Sossaman (Ochsner): In spite of my complaints, there is a lot to be grateful for. One is the other members of the board on this call who are dear friends. And I am sincerely appreciative of the colleagues here at work without whom it would have been difficult to make it through the past couple of years.

It was a great time to be a laboratorian during all of this. We got to practice medicine and see the value of the lab and have that credibility and say-so when talking to peers and the leadership. It was a very difficult time to work in the lab, but a lot of good has come from that, at least for me.

Mike Quigley, do you have a couple of thoughts of gratitude?

Dr. Quigley (Scripps): Through COVID and the cyber downtime for us, the perseverance and resilience of the whole lab team was amazing and heartwarming and made me happy to be where I am. And like Greg said, we now have greater interaction and recognition from the C-suite.



Carbonneau

Eric Carbonneau, MS, MT(ASCP), director, laboratory operations, Woodward Labs and TriCore Research Institute at TriCore Reference Laboratories, Albuquerque, NM: I'm thankful for our lab staff and our phlebotomists. One of our hospitals is at 140 percent capacity with patients in the hallways, and we're running at 20 percent vacancies. Our phlebotomists, our techs, and our blood bankers are coming in and taking care of those patients and I can't speak enough about them and what they're doing for all of us. Likewise, I'm grateful to all of you that we're not alone in this.

I'm also thankful for the innovators. There are a lot of COVID point-of-care tests coming out, and we're getting to see that in our research institute.

Jim Crawford, what are you grateful for at Northwell?

Dr. Crawford (Northwell): I would extend what everyone else said and add to it. In the world community of science, medicine, and laboratory, this has been an extraordinary time for us to come together in support of humankind, and it isn't limited to the United States; it is truly a world event. I think we've risen to a societal challenge—expectations that have never been this high before, including the development of new diagnostic tests. We have come together as colleagues across the miles. That's something to celebrate. It starts with the people we work with. It's a privilege to work with the people in our own environment, but it's also the privilege of working with people across the country and the world. This is something to be tremendously thankful for.



Schofield

Stan Schofield, do you want to share a final thought or two as we wrap up?

Stan Schofield (NorDx): When I lost my wife a couple of years ago, COVID became my mission and many of you who are my dear friends became my family. We will get through this. We are in this until we win this. We are making a difference. Our laboratories are making a difference. They say it's an unprecedented time; it is for laboratory medicine and science in our lifetime. Be proud of what you do.