



Episode 46: Beyond burnout: Key factors and strategies to solve the laboratory staffing crisis

Josh Casey: Hi everyone, I'm Josh Casey. Welcome to *QuidelOrtho Science Bytes*, your trusted source for diagnostic insights and innovations. The healthcare staffing crisis has reached epidemic proportions, affecting every area of the industry, from primary care doctors and surgeons to nursing and hospital management. The negative trend was accelerated by the COVID-19 pandemic. However, one area where worker shortages have been acutely felt for decades now is in the clinical laboratory. The role of the medical laboratory technologist is essential to patient care. And where 70% of clinical decisions depend on laboratory test results, according to the U.S. CDC, keeping labs fully staffed and laboratorians performing at their best is critical to maximizing health outcomes, but several persistent challenges have plagued the lab, including an aging population and workforce, increasing demand for diagnostics and long stressful hours with some of the industry's lowest wages. What, if anything, can be done to ease the staffing crisis and improve working conditions in the lab? Here with us today to discuss the issues and possible solutions is Katy Marcum, Global Head of the Clinical Lab's business unit at QuidelOrtho. Katy is responsible for leading innovation and commercial success of the business unit worldwide, including strategic direction and solutions development for laboratory diagnostics. In her more than 13 years in the clinical laboratory and in vitro diagnostics industry, Katy has served in corporate leadership roles and in the lab with top-tier hospitals, including specimen processing and registration, core lab generalists, and microbiology and serology. With experience both as a supplier and in the field as a lab scientist, Katy has a unique perspective on the challenges facing the clinical lab, having seen firsthand the impact of the staffing shortage. We're thrilled to have her with us today on the podcast. Welcome, Katy. Thank you for joining us.

Katy Marcum: It's great to be here, Josh. I'm really excited to be part of this super important discussion.

Josh Casey: Excellent! Let's jump right in then. From a historical perspective, the laboratory staffing shortage is really nothing new and looking ahead, the U.S. Bureau of Labor Statistics projects more than 24,000 vacancies for clinical laboratory technologists per year over the next decade. Can you talk a little bit about what makes this role such a challenging one to keep filled?

Katy Marcum: Yeah, of course, so first, I would say that the training and the amount of knowledge and skills laboratorians need to do the job are, are really significant factors here. Lab techs need to have a strong scientific background and a foundation in chemistry and biology to do their jobs well. They also need the skills and know-how to analyze and interpret data and test results accurately. And they need to be able to do all of that under a great deal of pressure and time constraints. Many states also require a licensure for certain types of lab work, so there are definitely a lot of reasons why these requirements can be a barrier to welcoming in new talent into the profession. We've also seen that laboratory technologist programs at 2- and 4-year colleges and universities have been turning out fewer and fewer graduates. And many of these programs have been eliminated due to the lack of enrollment and inability to maintain the finances needed to keep these programs viable for the schools. It's really expensive to run a lab, and so that's the same for an academic lab as well. And to have a certified program, it's, it's not always the most



economic choice for, for larger institutions. So, fewer graduates and a diminishing number of programs are having an impact. It's gotten so tight that the U.S. Bureau of Labor Statistics reported that academic programs are now generating less than 42% of the workers needed to fill the gap. I also mentioned the pressure of the working environment. Lab techs have so much on their plate and managing multiple complex tasks from the minute they start their day until they leave the lab. It can be very, very stressful in that sense. And as the population gets older, we're also seeing an increase in demand for diagnostics and laboratory services. So it's not going to ease up. We have fewer lab techs who are being asked to do more and more. And there's no room for error, really. They're given critical diagnostic test results that are going to contribute to patient care, and they have to get it right every time, and they know that the clinical decisions and patient health rest in their hands. So taking all this together, these factors are really compounding stress and burnout in the laboratory.

Josh Casey: Got it. So there are many factors driving staffing and workplace dynamics in the lab. Thinking about job satisfaction and how things like compensation affect outlook, how come we can't just pay lab techs more? Won't that solve the issue and help attract candidates?

Katy Marcum: Absolutely. Pay is very important, but it's not that simple for a couple of different reasons. Lab techs are definitely on the lower end of the pay scale, when comparing against other healthcare professionals, which is really a factor of economics. Of course, it would be great if everyone could be paid as much as possible, but there are a lot of careers where people are highly motivated by the work and not necessarily driven by money. We know lab techs are people with passion and a sense of purpose, and they're deeply committed to the role they play in patient care. It's not to say that more money wouldn't help or that they don't deserve it, they certainly do, but it's not entirely why people pursue this line of work. I think we can work with healthcare administration leaders to look at the lab beyond just a cost center and improve how we quantify the value of the laboratory staff beyond test results. Diagnostics is about decreasing length of stay, increasing availability of beds to treat more patients, reducing medical errors and minimizing time to critical interventions. The lab has a significant impact on patient care and hospital operations. We know that the laboratory can be a tough environment too, especially in the hospital hierarchy where there's something of an order of seniority as it relates to how close the staff is to the patient – surgeons, doctors, nurses and so on. And so among lab staff, there's often that sense that there isn't a lot of respect for the contributions that they make to patient care. Underscoring this point and how it relates to pay, QuidelOrtho conducted a research project to try to understand more about the pressures and challenges facing laboratories. When we asked about ways to help improve the working environment, lab techs rated greater personal recognition for the role over improving pay. The same study also found that 99% of all respondents at every level, from lab tech to executive management, agreed that the good they do for patients is the best part of the job. So there is alignment across roles that it's all about the patient.

Josh Casey: That's an interesting point. How can lab directors increase recognition for the work their teams do and the role they play in patient care?

Katy Marcum: Yeah, I mean, recognition comes in many forms. And again, I don't want to understate the role that compensation has in this. The lab managers and directors have a responsibility to advocate for higher pay when possible. Whether that's salaries, overtime or bonus-based pay, aside from compensation, having some formal programs for recognition



and appreciation can make a big difference. Things like employee of the month, peer-to-peer recognition and providing regular praise for the effort to celebrate success as a team. Basically, if you value your team members, let them know it however you can. What really helped me during stressful times in the lab were my colleagues, my management team and key clinical contacts in the organization that could help share more context from a clinical perspective about what I was working on. For me, it was helpful to see that the work that I did had a real impact on people. Hearing about positive outcomes we helped support is what kept me going. Many times, the lab is seen in such a negative light because we're the guardians of quality, and that comes with uncomfortable conversations we have to have with healthcare staff to ensure that we get quality samples so they can receive quality results. Another important consideration for creating recognition is to build career paths for your lab team. A lot of lab techs enter the field, then leave after a few years of what they consider to be stagnant or limited growth. And we have a lot of lab technicians who have stayed in their roles and are now retiring. Defining levels of responsibility and seniority can show staff that there are growth opportunities in the lab, that they have a chance to be recognized for their hard work and it will help them move forward in their careers.

Josh Casey: Going back to the point you made about economics and compensation for a minute, we know it costs a lot of money for organizations to fill open roles, whether it's recruiting costs or lost productivity. What are some additional economic factors that come with turnover in the lab?

Katy Marcum: That's a really great area to highlight. There are economic consequences that come with staffing challenges and job vacancies, and that's just the standard cost of doing business in all industries. However, what we have seen after the COVID-19 pandemic is that the healthcare sector is facing unique struggles to build back the workforce. So, there are costs that come in terms of revenue, growth, job satisfaction, and at its worst, it can also come at a cost to patient care and the ability to deliver on the mission. One of the more alarming findings from the QuidelOrtho study I mentioned earlier was that just 12% of laboratory technologists reported they were extremely likely to stay in the diagnostics field – 12%. And a separate industry report found that the medical laboratory technologist turnover was amongst the highest of all roles in the hospital at 15.9%. Total turnover costs for the average hospital translate to about 4.82 million losses annually, and it's estimated that replacing a single lab tech can cost 30% to 150% of their annual salary. These costs add up fast and include everything from recruiting expenses, new hire training, lost productivity and more.

Josh Casey: So we've talked a lot about the human side of the staffing crisis. I want to switch now to discuss technology. What are some ways that laboratory technology and innovation can help staff manage ever-increasing workloads and alleviate some of the stress and demands of the laboratory workplace?

Katy Marcum: That's a great question, and there's really so much we could talk about here, so I'm excited to jump into it. The clinical lab is an area of tremendous innovation and finding new ways to leverage technology to assist lab technicians in their daily work. Automation is probably the most relevant example as it relates to today's topic, so I'll spend some time talking about that. There are so many manual tasks and procedures that the lab tech must perform at every stage, with pre-analytical, analytical and post-analytical. Automation can really minimize the risk of errors during those manual handling steps, handling samples, mislabeling, incorrect aliquoting and preventing sample contamination. This can take some of the pressure off of the lab staff while also freeing them up for other



complex tasks like results interpretation and analysis. Automated lab systems can also improve testing turnaround times by processing a larger volume of samples faster and with greater accuracy than manual methods. In the face of staffing shortages, this is a valuable solution for helping stretched lab teams do more with less. Combined with the powerful laboratory software, these systems can also help standardize laboratory procedures and workflow, ensuring consistency, efficiency and sample processing and testing operations across teams and locations. A lot of automation technology has been around for a long time, but in the study I mentioned earlier, only 35% of lab techs felt they had access to the most up-to-date equipment. So there's a lot of room for growth and adoption in this area.

Josh Casey: Just 35%, that's quite the gap and quite the opportunity to help mitigate some of the burden in the lab. But that's all the time we have for today. Thank you, Katy, for joining us to share your insights. I hope everyone enjoyed the conversation. Please be sure to review the sections and links within the podcast description. You can always go back and listen again if you'd like more details. Thank you all for listening in. If you haven't already, please subscribe to *QuidelOrtho Science Bytes*, our monthly podcast brought to you by QuidelOrtho Corporation, where we are transforming the power of diagnostics into a healthier future for all. Until next time, take care, everyone.

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