LEADING LABORATORIES



HOW LABORATORIES CAN LEAD DURING CHALLENGING TIMES

Demonstrating value and resilience in the face of current challenges in the laboratory workforce

ASCP | The Joint Commission



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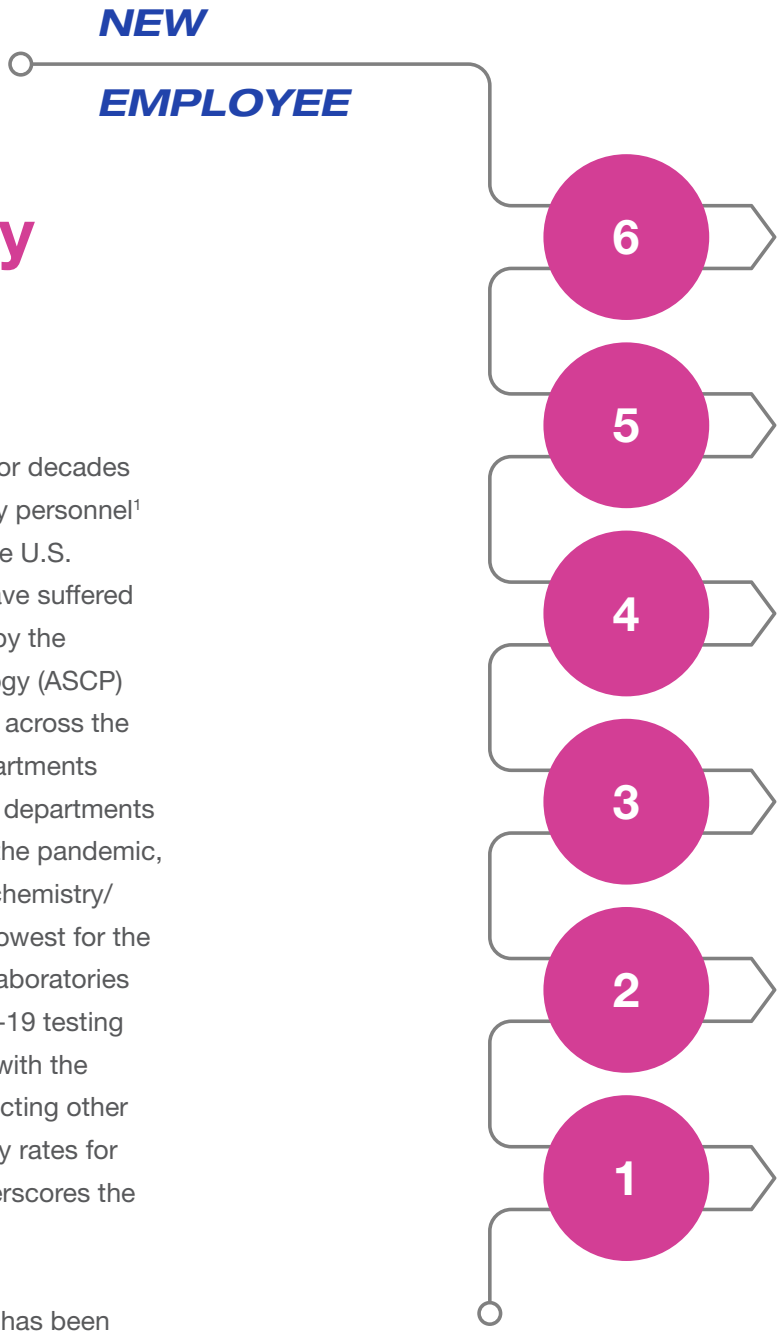




Introduction

Laboratories are currently facing significant challenges from a variety of forces, ranging from a wave of older professionals retiring to increased demands on the workforce. These challenges have been further aggravated by disruptions and workforce shortages caused by the COVID-19 pandemic.[1] This paper seeks to address those challenges and offer strategies laboratories can use to set themselves up for success by achieving and demonstrating key pillars of laboratory excellence.

Challenges for Laboratory Managers



There have been ongoing concerns for decades about the supply of clinical laboratory personnel[1] even before the pandemic. Across the U.S. numerous laboratory departments have suffered vacancies. A 2018 Vacancy Survey[2] by the American Society for Clinical Pathology (ASCP) showed that the overall vacancy rate across the U.S. was highest in phlebotomy departments (13.20%) and lowest in point-of-care departments (4.03%). By 2020, with the arrival of the pandemic, the highest vacancy rate was in the chemistry/toxicology department (12.7%) and lowest for the cytology department (3.9%).[3] Many laboratories had to quickly shift priority to COVID-19 testing volumes and reassign staff to assist with the COVID-19 response, negatively impacting other laboratory duties. Continuing vacancy rates for clinical laboratory professionals underscores the urgency of these concerns.

One challenge for laboratory leaders has been finding and retaining qualified staff, especially for certain shifts and in rural areas. Simply hiring enough well-trained laboratory professionals is a challenge in and of itself, under the best of circumstances. The average amount of time it takes to hire staff for most departments, they report, is three to six months, and as much as seven to 12 months for more specialized areas such as immunology.[3]

On average, hiring staff for most departments takes 3 to 6 months, while hiring supervisors can take as long as a year.

Source: The ASCP 2020 Vacancy Survey



The pandemic exacerbated the challenges that laboratories already faced in filling open positions, with many staff opting to retire early or leave the field altogether. One laboratory manager of a well-respected medical institution in a highly desirable area reported, "I have lost 25% of my staff in the last six months and have another 10% scheduled to retire this year. Even in normal, non-COVID times I would be unable to even hire at this pace, much less onboard and train."[3]

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COMPETITIVE PAY

Additionally, laboratories have found themselves losing out on employees to other labs that offer competitive pay and benefits, as low wages are a concern for some laboratory professionals.[1] The tracks with what data shows; 14.2% of respondents to the 2020 Vacancy Survey reported a need for better salaries.[3]

Key employee informants noted that metropolitan areas experience competition between laboratories, although vacancy rates are lower because employers can pay relatively well. In rural regions with fewer qualified applicants, recruitment and retention problems tend to be more acute.[1]

TECHNOLOGY

Laboratory directors are also dealing with technological shifts that contribute to staffing changes and the increasing need for qualified workers. This technology includes automation of tasks, emergence of point-of-care tests, and greater reliance on laboratory information systems (LIS) and electronic health records (EHR).[3]

Molecular testing was cited as causing the most significant staffing changes in 2020, according to 65.2% of respondents. Laboratory managers also encounter challenges finding candidates with LIS experience. Some indicated that constant upgrades to LISs require additional staff training and a systems manager, an additional position they were now forced to fill.[3]

These increased needs for technological fluency put pressure on educational systems to produce well-trained professionals, yet there is limited published information about why the skills of the clinical lab workforce are not meeting hiring expectations or how technological changes are affecting these skill needs.[1]



EDUCATIONAL CHALLENGES

Some of the educational challenges incoming laboratory professionals are struggling with have to do with the size of programs. From a study by Garcia et. al, informants reported small program cohort sizes, no matter the type of clinical laboratory program, with eight to 20 students in a typical cohort, which are simply too small to produce the numbers of laboratory professionals needed.[1]

Interviewees also expressed having trouble securing clinical rotation sites for their students as many sites can only accommodate one or two students rotating through only a subset of laboratory sections. This creates limited program enrollment, especially in rural areas.

Clinical laboratory programs also tend to be more expensive to operate than many other academic education models because of the additional costs of maintaining simulation laboratories for students to practice performing tests and other laboratory procedures. Higher costs and smaller class sizes leave these programs vulnerable to being reduced or eliminated in environments where higher education funding is being cut. Interviews confirmed the ongoing threats of funding cuts, program closures, and decreasing enrollments.[1]

Additionally, many programs have found that a lack of awareness of clinical laboratory careers by the general public has been a significant barrier in recruiting more students.[1]

A GENERATION OF EMPLOYEES IS RETIRING

Another significant challenge for laboratory leaders is that across occupations, but mostly among higher-wage occupations, the clinical laboratory workforce is aging and increasing numbers of individuals are retiring or leaving the workforce. Informants said that many who joined the clinical laboratory workforce when it was expanding during the 1970s and 80s have retired in recent years, mainly among the occupations requiring two or more years of post-secondary education.[1]



COVID-19 CHALLENGES

In addition to all the ongoing challenges, the COVID-19 pandemic has significantly affected clinical laboratories in increased burden of testing, disrupting the stream of incoming graduates entering the workforce, and through hiring freezes and furloughs. Nearly 69% of respondents in the 2020 Vacancy Survey[3] reported that their laboratory encountered a hiring freeze or slowdown during the pandemic.

For employers, the COVID-19 pandemic has amplified the need for laboratory professionals across the board.[1]

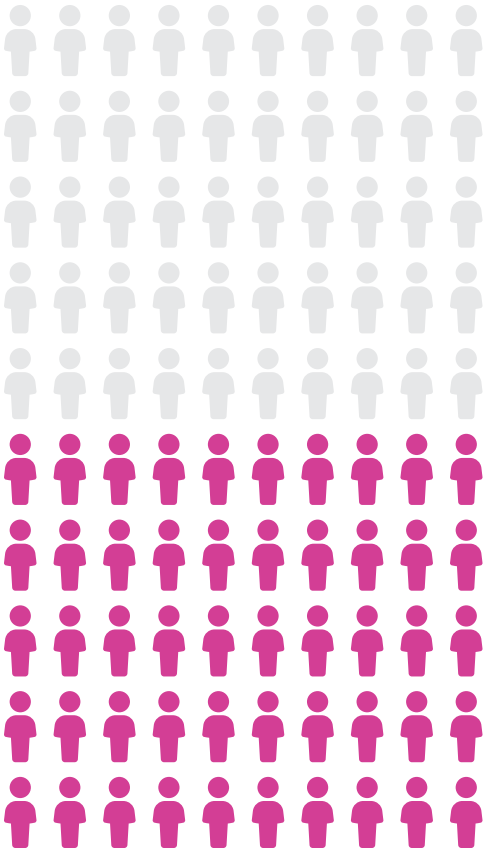
In academic settings, at the height of the pandemic, a lack of clinical rotations and recruitment challenged lab training directors. As a result, many programs are considering adding more online training options to counter these problems.[1]

BURNOUT

The workforce in these labs has also experienced burnout and stress due to increasing test volumes and the workload of developing and implementing processes for new types of testing (e.g., molecular and serology COVID tests). A study titled "Impact of Organizational Culture on Burnout" conducted by ASCP in August 2021 found that more than 50% of laboratory professionals have experienced burnout and more than one fourth of them reported that their burnout was caused by the COVID-19 pandemic, which contributed to concerns around turnover and retention.[4]

More than 50% of laboratory professionals surveyed in 2021 reported experiencing burnout

Source: Impact of Organizational Culture and Burnout



Current Trends

Despite these many challenges, the results of the 2020 ASCP vacancy survey show that vacancy rates are lower in many departments compared with the 2018 report, except for blood bank, chemistry/toxicology, flow cytometry, LIS, quality assurance (QA) performance improvement (PI), molecular pathology, and point-of-care.[2,3]

Staffing losses may also be slowing since retirement rates for most of the departments surveyed continue to decline. This suggests that the largest wave of retirements may have passed.

However, the time it takes to bring on new laboratory professionals has increased. For most departments, hiring supervisors now takes between three months to a year, compared with data in 2018 showing three to six months. Blood bank, chemistry/toxicology, hematology/coagulation, immunology, microbiology, and point-of-care departments take at least a year to hire a supervisor.[2,3]

Employers are being pressed to offer bigger sign-on bonuses—the rates of which have increased from 2016 to the present (12.4% in 2016 vs 17.5% in 2018 vs 24.2% in 2020)—to successfully recruit new employees.[2,3,5] Survey respondents reported that sign-on bonuses were an important factor in successful recruitment to positions, and they stated that they're losing out on new hires over competitive bonuses at other laboratories.

Due to these gaps in staffing, laboratories have continued to use an increasing percent of temporary personnel to fulfill the duties of unfilled open positions (15.0% in 2016 vs 15.7% in 2018 vs 17.2% in 2020).[2,3,5]



Future of the Workforce

Even though the data are alarming, the industry is still growing. The U.S. Bureau of Labor Statistics reported in 2021 that employment of medical laboratory professionals is projected to grow 11% from 2020 to 2030, faster than the average for all occupations.[6]

Laboratory directors must look for ways to bolster and ensure the future of the workforce to keep laboratories thriving. In the study by Garcia et al, one common theme prevailed to improve resilience of the workforce: creating a supportive environment for laboratory professionals and improving some crucial skills.[1] Two sets of skills and credentials dominated the discussion as those that will be in highest demand in clinical lab professions going forward: soft-skills such as communication skills, resilience and leadership, and critical thinking skills, especially in using automated testing platforms, emerging technologies, and troubleshooting.

Additionally, when asked about the driving forces for any changes over time within the profession, participants shared the potential need for on-the-job training, especially due to lack of training programs and higher vacancies, licensure requirements for work, and encouraging staff engagement.[1]



CROSS-TRAINING

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APPEALING TO THE INCOMING GENERATION

Perhaps most important, since the future of the profession relies on the incoming generation, Gen-Z, who have different motivators, values, and approaches to work, increased focus on the generational differences in laboratories might help effectively recruit and retain younger laboratory staff.[1,7]



Rising to the Challenge: Leading Laboratories

So how can individual laboratories and lab leaders rise to the challenge, adapt to the future, wwand demonstrate leadership in this industry? It will take a combined number of efforts and strategies. For one thing, laboratories can capitalize on the public goodwill the pandemic created toward healthcare professionals of all kinds.

Ali Brown, MD, Chief Officer, Medical Quality at ASCP said, “It’s important to mention the tremendous job that labs have done during the pandemic, developing testing, executing testing, validating and bringing on new instruments on the fly, really working in substandard conditions with lowered staffing.”

According to Amy Spiczka, MS, HTL(ASCP)^{CM}SCT,MB^{CM}, Senior Director, ASCP Center for Quality and Patient Safety, “Leading Laboratories—those who choose to elevate the positive value of laboratories for the patient care continuum—find ways to make themselves more visible. Leading Laboratories drive both public awareness and greater acknowledgment within their own organizations. They will prioritize patient care, and emphasize trusted leadership through challenging times, driving industry respect.”

This may require advocacy and legislative change, as well, and will help to attract and retain vibrant qualified clinical laboratory and pathology team members.

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—Amy Spiczka

What Defines a Leading Laboratory Today?

In 2018, ASCP recognized the need for ways to promote laboratory visibility, improve the functioning of laboratory teams, and differentiate themselves from other labs. They approached Lynnette Chakkaphak, MS, MT(ASCP), System Director, Laboratory and Imaging at St. Vincent's HealthCare, to create the criteria for a potential new program. Chakkaphak drew in experienced peers Barbara Caldwell, MS, MASCP, MLS(ASCP) CMSHCM, a former laboratory administrative director, medical laboratory scientist, and consultant based in Maryland, and Diana Kremitske, MHA, MS, MT(ASCP), VP for Institute Operations at the Diagnostic Medicine Institute at Geisinger, in Pennsylvania. The three luminaries put their collective decades of experience together and brainstormed. They came up with what is now, in partnership with ASCP and The Joint Commission (TJC), a four-pillared designation, called Leading Laboratories, that Chakkaphak said, "is like a roadmap to move your laboratory from the good category to the great category."

Some of the key goals of Leading Laboratories are to elevate the role of laboratories within their organizations, highlight contributions made by all team members to build stronger, more resilient laboratories, and provide safe, effective patient care.

Caldwell feels that the program's timing couldn't be better. "Leading Laboratories is launching at a critical time of workforce shortages. It can be a vital force to help impact other initiatives that focus on the sustainability of our profession, which is where we all need to be focusing."

Kremitske added that, "Leading Laboratories not only shines the light on what laboratories do, but also helps to deepen those relationships with other health care professionals, and also around the patient's experience in the healthcare system to solve healthcare problems in general."

A LEADING LABORATORY DEMONSTRATES EXCELLENCE IN FOUR KEY WAYS:



ELEVATING QUALITY OUTCOMES



SUPPORTING PROFESSIONAL DEVELOPMENT



CULTIVATING TRUSTED LEADERSHIP



PROMOTING LABORATORY VISIBILITY



Leading Laboratories is available to The Joint Commission-accredited laboratories only. According to Heather L. Hurley, Executive Director, Laboratory Accreditation and Health Systems Strategic Accounts and RPI Certified Yellow Belt for The Joint Commission, "Leading Laboratories is a recognition program that goes beyond accreditation to acknowledge the exceptional work that laboratories are doing. The Joint Commission is the oldest and largest accrediting body in the US, and the ASCP has influenced laboratory medicine and pathology for almost a century. Our missions align in terms of commitment to patient safety and quality, making it a unique and perfect partnership to create this recognition program. In addition, both The Joint Commission and ASCP are committed to building more resilient laboratory teams and elevating the critical role of the laboratory throughout the greater clinical care settings, within our communities, and amongst our patients."

"Leading Laboratories is like a roadmap to move your laboratory from the good category to the great category."

—Lynnette Chakkaphak

Four Components of a Leading Laboratory



ELEVATING QUALITY OUTCOMES

The first pillar, Quality Outcomes, depends upon developing and integrating clinical and operational strategies from evidence-based data to find solutions to gaps in care. “Quality is perhaps the most crucial pillar because quality is the foundation of any laboratory,” said Caldwell.

Though Caldwell feels all four components “work together very synergistically” she added, “we put elevating quality outcomes first because the laboratory is a key contributor to the patient experience, but the public at large doesn’t always know what we do.”

Quality is also dependent upon engaging every person in the laboratory, Chakkaphak explained. “Labs that can ingrain the thought that every single solitary person, regardless of their job, are pivotal to this providing of quality care for patients, will raise up to this bar that we’re calling the Leading Laboratory.”

“Quality is perhaps the most crucial pillar because quality is the foundation of any laboratory”

—Barbara Caldwell



SUPPORTING PROFESSIONAL DEVELOPMENT

Of course, labs can’t produce quality results without qualified, motivated people, “So improving laboratory knowledge, competence, and skill will only improve their effectiveness and the overall success of the lab,” Caldwell said.

“This pillar is really expressing a commitment to invest in your associates or staff members,” Chakkaphak explained.

It encourages laboratories to have “a programmatic approach to problem solving into and around performance improvement, that utilizes a toolkit based on some of these proven methodologies,” Kremitske added.

Improving performance is part of creating a culture of quality that is engaging for employees.

“Leading Laboratories is a way to engage employees around producing quality outcomes for the laboratory, since quality is everybody’s business,” said Hurley. And it really is a mindset or a culture, where people need to be thinking about their daily work in a way that improves quality on a regular basis.”

That focus on quality translates to better patient care, as well. “When you think about all the tests that are performed in the laboratory, we touch many, many millions of patients’ lives on a regular basis. So, it just makes sense that when we think about quality improvement in the laboratory,” Kremitske said.

CULTIVATING TRUSTED LEADERSHIP

A Leading Laboratory demonstrates excellence and transformational leadership to organizational leaders, administrators, and the C-suite, and is only as good as its leadership, the luminaries agree. And that requires creating a culture of trust, "where there are effective strategic plans and strong communication, and alignment to the organizational goals," Caldwell said.

Chakkaphak clarifies that part of trusted leadership "is showing that your laboratory has created an environment where you have encouraged your team to feel so valued and important to the operation of that lab, that their input is critical and that they will bring their performance to meet that level of expectation because you have inspired them to raise the bar."



PROMOTING LABORATORY VISIBILITY

Laboratory visibility helps labs demonstrate expertise, insight, and influence within the broader pathology and laboratory medicine community as well as to the public.

Visibility is also crucial to the engagement and morale of laboratory professionals. Chakkaphak likened being a lab director to an orchestra leader, all sections needing to "play well to meet the needs of the patient and also meet the needs of the staff and help them to grow."

If COVID-19 proved anything, "it is that the public is highly aware of front-line healthcare workers and not as aware of the integral nature of laboratory professionals, despite their crucial link in the healthcare chain," said Mark Crafton, MPA, MT (ASCP), Executive Director of Strategic Alliances in the Division of Business Development, Government and External Relations at The Joint Commission.

Because laboratory professionals are not regularly "at the bedside," they can fly under the radar, unobserved and disconnected from the patient experience, Chakkaphak said. "We need to be part of that engagement with patients and families because the laboratory essentially touches every patient that comes into our organization."

> ***"We need to be part of that engagement with patients and families because the laboratory essentially touches every patient that comes into our organization"***
>
> **—Lynnette Chakkaphak**

THE JOINT COMMISSION PARTNERSHIP

Both ASCP and TJC are aware of the importance of their two agencies' reputation in the field. Brown said the two organizations are "synergistic" in their focus on value, quality, and patient care.

Having TJC's seal of approval through this program is not just a stamp of approval, Crafton said, but "Fundamentally, accreditation is a quality improvement tool, and organizations pursue it to get better, and identify where their opportunities for improvement are, where their systemic vulnerabilities exist, that if not addressed could harm patients."

"We appreciate TJC's laboratory accreditation model, which really brings lab quality outside the four walls of the lab," Brown said.

The Leading Labs designation puts a spotlight on laboratories that might not be getting recognition due to being siloed within their own organizations. "So, the Leading Laboratories program requires integration, and for the laboratories to become part of the bigger quality improvement program of a hospital," Crafton said.

BUSINESS BENEFITS FOR LABS

Kremitske feels the Leading Laboratories designation is a one-of-a-kind opportunity that can transform laboratories and the part they play in healthcare. "It has an incredible opportunity to not only elevate laboratories, but to also raise the bar on performance," she said. "And it really is team based; it's not one person, not one leader, it really encompasses the entire team and reaches beyond the laboratory."

Crafton feels that the Leading Laboratories Recognition Program is good for business, because it brings a level of distinction for the laboratory and every individual that works in that laboratory, "from the pathologist who is the medical director of the laboratory, to the phlebotomist, who's out there drawing blood on that third shift in the emergency department."

He sees it as an opportunity for a laboratory to aspire to higher standards and "an opportunity to shine and get some recognition for their hard work and their contribution to the health care system," he said.

Moreover, since eligibility for the program requires the CEO or president of the organization to support the laboratory in their efforts to achieve this, Crafton pointed out that, "Right up front, you are getting buy-in from the senior leader of the organization, because a lot of effort and resources go into achieving it. You're not going to get there unless you have the support of the most senior leader in the organization."

Summary

While Chakkaphak hopes that the Leading Laboratories' guidelines will be seen "as the criteria that will help you be successful in creating a great lab, that you constantly look to as your guiding light," she also doesn't want any laboratory to feel overwhelmed by them. "Let's not give up. Let's continue to hone ourselves. You're not going to achieve this in one day."

For more information on Leading Laboratories, check out these resources.

Webstite: www.leadinglaboratories.org

Podcast: www.jointcommission.org/resources/news-and-multimedia/podcasts/take-5-leading-laboratories/

Video: vimeo.com/640147148

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