

## Decoding Doctors' Decisions:

# How System Friction and Patient Agency Affect Physicians— And What This Means for Lab Testing

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Healthcare professionals are under pressure. They must care for more patients, run more tests, and make faster care decisions—all while working with fewer staff, reduced budgets and reimbursement, and fractured access to services.

Among those affected are clinical laboratory professionals who validate and maintain more than 80,000 types of laboratory tests in use across U.S. laboratories to help physicians and patients inform care decisions.<sup>1</sup> Altogether, 14 billion test results are produced for patients each year.<sup>2</sup>

A diminishing laboratory workforce threatens the collaboration doctors rely on for clinical clarity. Though understaffing and financial pressure occurs system-wide, prolonged attention on addressing laboratories' operational challenges has eclipsed the value clinical laboratory professionals contribute to helping doctors interpret test results that support patient care.<sup>3-5</sup> While clinical laboratory services account for merely 4% of hospital costs, they are often a target of cost containment efforts.<sup>6</sup>

As a result, laboratory services have been consolidated and testing has been outsourced to centralized testing facilities, further challenging the collaboration between clinical laboratory professionals and physicians. Meanwhile, the implementation of automation-heavy "dark labs" has risen to help keep test results generating amid staffing shortages.<sup>7</sup>

Yet in the age of automation, the human collaboration physicians depend on still counts.

This survey of 408 physicians, conducted by YouGov and commissioned by Siemens Healthineers, highlights the indispensable role of clinical laboratory professionals and the laboratory services they perform to support patient care from the perspective of those who rely on these services daily.

The data overwhelmingly demonstrate clinical laboratory professionals' contributions are interwoven in clinical practice and reveal physicians as perhaps the lab's most influential advocates.

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***It also reveals pressure on physicians is bleeding into the clinical laboratory and becoming a shared burden***

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Doctors disclose how friction within the healthcare system is influencing their patients' lab test orders. Along with patient requests influencing test-order decisions, doctors indicate that systemic pressures to reduce lab testing costs and the costs of specific tests may influence their orders, too.

Though clinical experience and evidence-based guidelines remain the foundation of their clinical decisions, the choices doctors make seem to also increasingly consider implications for patient satisfaction.

Recognizing laboratory professionals as collaborative clinical partners, and resourcing clinical labs as essential infrastructure rather than cost centers, is vital to safeguarding the important clinical support laboratory professionals provide that physicians rely on. What's more, it may serve to improve patient satisfaction.

## The three most noteworthy results

Doctors have a robust clinical toolkit to inform patient care decisions, which includes laboratory testing. To what extent physicians use and rely upon laboratory testing, however, has historically been unclear. Here's how the surveyed doctors say laboratory testing supports their clinical practice.

*Results help inform my decisions...*

# 98%

of physicians have **modified a diagnosis or treatment plan** based on lab test results.

*...and help determine my actions.*

# 98%

of physicians agree lab results help them **justify their clinical course of action.**



**Together, we help the health system and avoid unnecessary patient interventions.**

**100% of physicians agree lab results help streamline how they use other healthcare resources**

(for example, more effective use of imaging and biopsy).

N = 408 physicians

Physicians overwhelmingly affirm their use of laboratory services to support patient care, by informing clinical decisions and guiding stewardship of other healthcare resources. The data also suggests some physicians may be relying heavily upon test results. Test results are meant to be interpreted in the context of each patient's medical history, clinical presentation, and all other relevant findings.

Clinical laboratory professionals serve an important role in counseling doctors about which tests to order and the specific attributes, including certain limitations of particular tests (such as potential causes of interference). When clinical labs are adequately resourced and empowered, collaborative relationships between clinical lab professionals and physicians enable more informed and efficient patient care.

## The interdependence of physicians and clinical lab professionals

Physicians rely on clinical laboratory professionals to run patient samples and return results in a timely manner to inform clinical decisions. Obtaining lab results efficiently offers higher clinical value and helps provide more meaningful interactions with patients.

# 99%

of physicians agree clinical lab testing is **an integral part of the healthcare system**

N = 408 physicians



**99% of physicians say:**

***Delayed lab results affect patient care.***

***Lab tests offer higher clinical value when the results directly aid the next step for my patients.***

Healthcare staffing shortages are top-of-mind for physicians, with 94% agreeing that healthcare staffing shortages concern them.

However, the effect of lab staffing shortages is felt more acutely. 96% agree that, when labs are short-staffed, it has a downstream effect on their patient care.

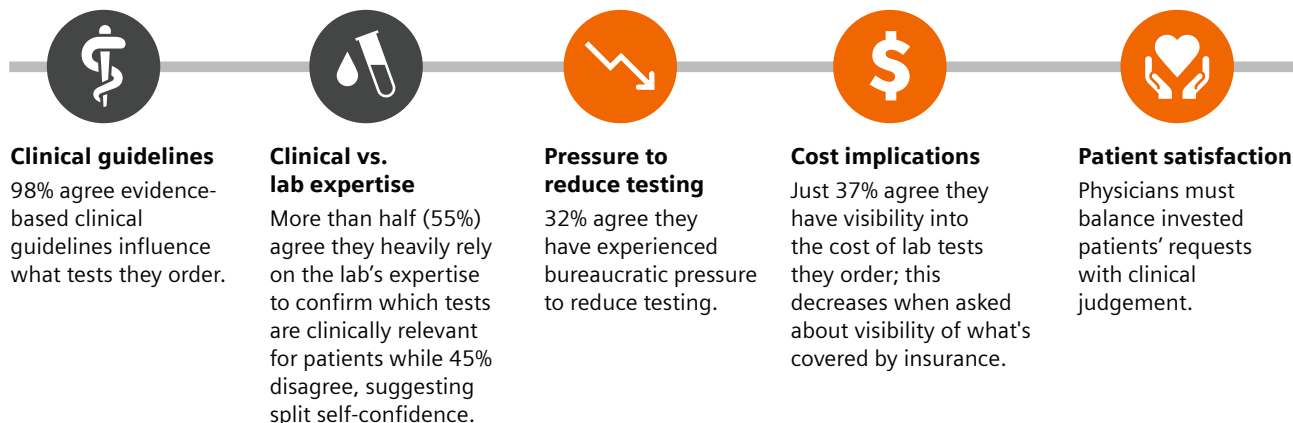


Siemens Healthineers details the impact of the workforce shortage on patient care, as told by laboratory professionals, in its *Clinical Labs in Critical Condition* report.

## The pressure on physicians is bleeding into the lab

While experience and evidence-based guidelines remain foundational to their clinical decisions, doctors are navigating other influential factors such as patient satisfaction. Patient satisfaction, or the evaluation of care relative to patient expectations, is a benchmark that increasingly affects reimbursement, retention, and referrals.

### What influences physicians' test orders



N = 408 physicians

## Patient agency in clinical practice

Patient agency refers to a patient's ability to understand, contribute, influence, and act on healthcare decisions that affect their care and outcomes. Rising patient agency is creating tension between clinical judgment and patient expectations.

Today's patients take a more active role in their care. They have more access to health information—and misinformation. Though patients have rising confidence in their ability to find trustworthy health information and distinguish between good medical advice and bad, there is an alarming surge in some patients' willingness to devalue their provider's medical advice in favor of advice from friends, family, and even social media.<sup>8</sup>

But is this trend making its way into physician-patient interactions?

When patients raise concerns to their doctors, laboratory testing is usually an initial option for further exploration. In the pursuit of information, these requests, though initiated by the patient, can leave them with unexpected costs, stress, or delays, for example. Further, false positives can lead to additional clinical evidence gathering or more investigative steps that may or may not be covered by insurance.

# 69%

agree that **potentially getting sued for misdiagnosing a patient is a top-of-mind concern**



92% consider whether the tests they order might lower the risk of misdiagnosing a patient.

N = 408 physicians

However, avoiding misdiagnosis also is a reason doctors suggest they will use laboratory testing. In fact, 87% agree that errors that negatively impact a patient's care also weighs heavy on their conscience and affects their mental health.

Prioritizing patient satisfaction fosters an environment where patients can conflate negative experiences of having clinical concerns dismissed or invalidated, or more seriously, accuse physicians of "medical gaslighting."<sup>9</sup> Laboratory testing may be somewhat mitigating, though it can add unnecessary volume and expense for already overburdened clinical laboratories. Moreover, exploratory lab testing can generate confusion about what all of the test results mean, further underscoring the necessity of collaboration between clinical laboratory professionals and doctors.

## Are patients influencing lab testing?

To learn how doctors' views and actions concerning patient agency compared to patients' views and actions, Siemens Healthineers commissioned YouGov to survey 1,000 U.S. patients who have had laboratory testing within the past two years.

### What doctors say...

**90% agree**

Patients **feel entitled** to diagnostic testing of their interest upon request.

**76% agree**

Patient requests have forced me to weigh patient satisfaction against **clinical judgment**.

**84% agree**

I have ordered lab testing to **satisfy a patient's request**.

N = 408 physicians

N = 1,000 patients

### Do patients agree?

**93% agree**

I expect my doctor to order testing of interest to me **upon my request**.

**87% agree**

I **trust my doctor's recommendation** if they advise against a test I request.

**37% agree**

I have asked for a lab test of interest to me based on medical info I've **learned from other sources**.

Pressure physicians feel closely correlates with patients' expectations of testing on request

**13% disagree**

flags an erosion of trust in doctors or a growth in confidence toward self-advocacy.

Patients' expectations are creeping into clinical practice.

## Systemic pressure to reduce testing

*Nearly one-third of physicians have experienced pressure to reduce their lab-test utilization.*

The tug of war physicians face between bureaucratic pressure and patient satisfaction translates to more conservative decisions about laboratory tests patients may need on one hand, and on the other hand, superfluous test orders to accommodate patient requests that may not necessarily be clinically justified but may serve to satisfy a patient's request.

However, patient care and benefit are squarely top-of-mind.

**95%** agree that ordering tests to **validate a patient's care plan** is their priority over conserving resources.

As test options expand, physicians are **relying on clinical laboratory professionals** for guidance.

**55%** agree they heavily rely on the **lab's expertise** to confirm which tests are clinically relevant for their patients.

**96%** of physicians are open to receiving **constructive feedback from the lab** to improve or enhance their test ordering practices.

## Cost transparency helps physicians help patients

Inadequate healthcare coverage may prevent patients from getting the appropriate level of laboratory testing. Though they want this information to be more transparent to inform patients' testing decisions, 67% of physicians say they do not have visibility into whether the tests they want to order are covered by their patients' insurance.

Asked of physicians with visibility into insurance or cost of tests (n=176), 60% said the cost of a lab test has led them to postpone tests they would have otherwise ordered.



### Why cost transparency matters: the patient perspective

83% of the patients surveyed get bloodwork done periodically, ranging from monthly to annually.

**5%** said they have not done bloodwork their doctor recommended because it was **cost prohibitive**.

**29%** revealed they had **unpaid medical bills** (n = 294) of which,

**52%** said their medical debt included **unpaid lab testing fees** (n = 152).

N = 1,000 patients

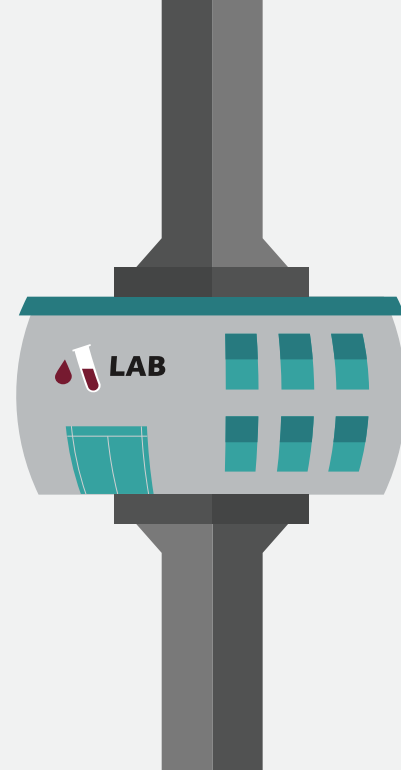
## The ripple effect of overlooking the lab

In January 2025, 58% of U.S. healthcare executives surveyed reported widespread workforce challenges were having a significant impact on their organization.<sup>10</sup> To address healthcare staffing shortages and clinician burnout, and to overcome mistrust clinicians feel toward leadership to do right by their patients, healthcare leaders are advised both to foster a culture of value and invest in technology that benefits both the organization and its employees.<sup>10</sup>

This is a crucial point of convergence where executives are rethinking how they define value and foster meaningful connections that boost retention, while physicians indicate they want greater collaboration with the clinical laboratory professionals they trust.

Doctors want stronger partnerships with clinical lab professionals to improve cost transparency, reduce unnecessary testing, and gain clearer, more actionable insights for clinical decisions. These interests benefit patients and the greater health system.

However, clinical laboratories face three major hurdles that hinder dedicating resources to collaborative engagement, innovation, and tasks beyond those essential for generating test results.



### Underfunding

Achieving return on investment that resonates with health system leadership has historically been challenging for clinical labs operating under tight finances. More than 1,500 hospital mergers have occurred from 1998 to 2017, and another 428 hospital and health system mergers were announced from 2018 to 2023.<sup>13</sup>

As a result, whether to outsource or consolidate laboratory services to control costs is considered.<sup>14</sup> Though, as clinical laboratory professionals have undertaken greater effort to demonstrate the lab's value in ways that resonate with decision makers, recognition has grown that under-investing in the lab can be penny-wise, pound-foolish. Inefficiencies create more expensive downstream costs or create delays that may affect patient care and reduce patient satisfaction, an established key performance indicator across the health system nationwide.<sup>15</sup>



### Understaffing

Over four decades, the number of clinical laboratory personnel entering the workforce has failed to keep pace with the number of professionals retiring. Declining interest in these lesser-known medical fields has led to academic and training program closures and fewer graduates. The number of training programs has declined 7% to fewer than 250 nationwide since 2000.<sup>11</sup> With around 338,000 laboratory professionals currently practicing, it is the equivalent of one laboratory scientist for every 1,000 Americans.<sup>12</sup>



### Declining reimbursement

Under Medicare's PAMA law, reimbursement rates for many lab tests faced annual cuts of up to 10% before a temporary pause during the COVID-19 pandemic. As a result, 75% of common tests faced nearly a 30% reimbursement reduction. While recent legislation has offered temporary relief, concern remains about future reductions for these vital laboratory tests and legislative efforts to course-correct are ongoing.<sup>16</sup>

In addition to the tests laboratories already maintain, the U.S. Food and Drug Administration clears around 500 new in vitro diagnostics annually through its approval pathways that clinical laboratory professionals then consider whether to implement.<sup>17</sup>

Implementing innovative technology and tests can help improve the lab's profitability—when the budget is available.

## Is the future of lab testing dark?

Here's what is certain about the future of lab testing: the number of patients requiring test results and costs to operate the lab will continue to rise. A continuing downward trend of fewer laboratory professionals entering the workforce will inevitably result in more centralized testing facilities and potentially longer wait times for patients as consolidated testing facilities handle more samples. Testing prices may also rise for patients as competition dwindles, and if reimbursement continues to decline.

Physicians say clinical laboratory professionals are essential partners in delivering high-quality patient care, but a shrinking laboratory workforce may threaten the collaboration doctors rely on for clinical clarity.

Among the opportunities to enable physicians to continue to receive valuable clinical consultations they rely on, and patients have access to testing advancements for their care, is to strengthen the lab with technology that enables lab professionals to focus less on manual, repetitive testing tasks.

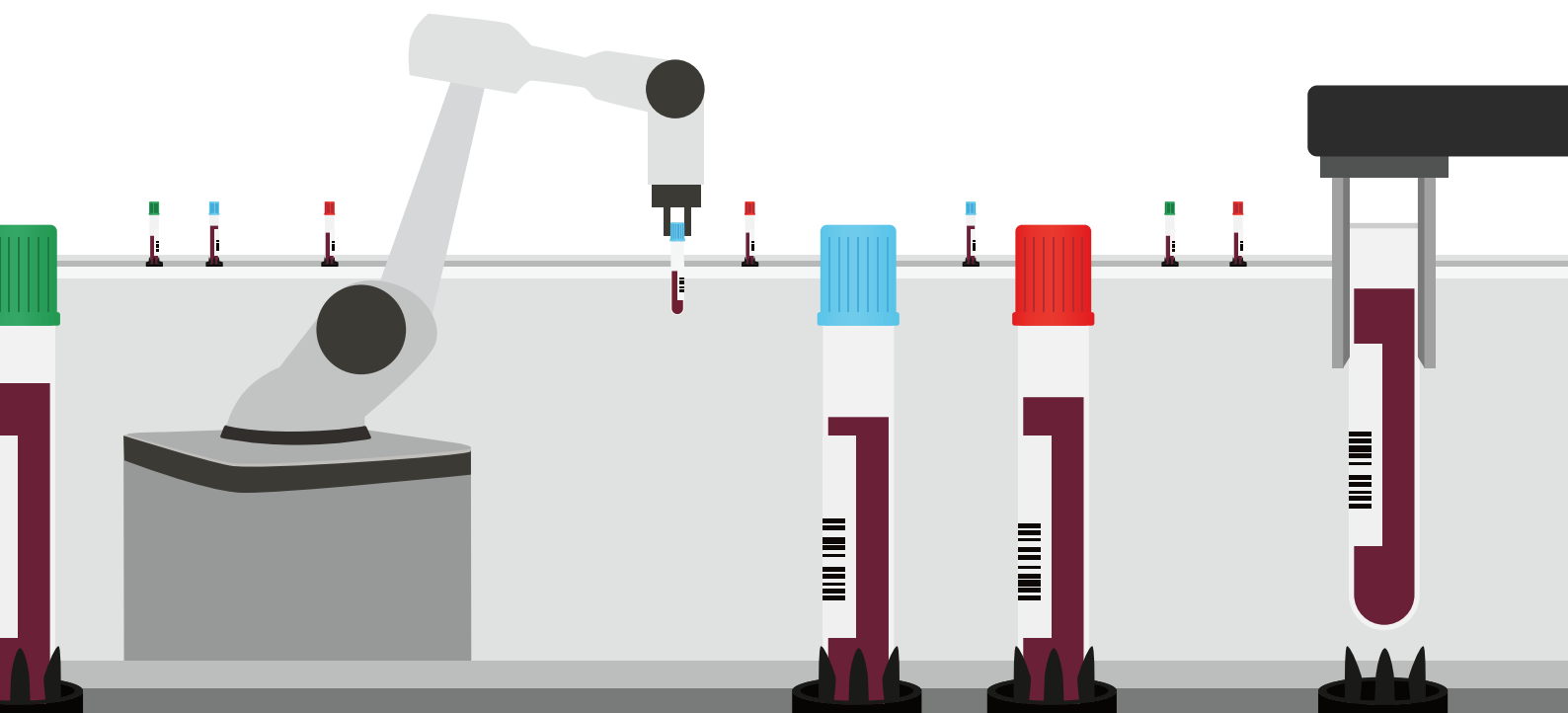
A new clinical laboratory model is helping. "Dark labs" are laboratories primarily operated by robots and automation, with only essential tasks left to the remaining clinical lab professionals.<sup>7</sup> Maintaining patient satisfaction benchmarks—vital factors for reimbursement, retention, and referrals—might even hinge upon these investments.

And though medical technology manufacturer R&D efforts are focusing on technology that will attract the next generation of clinical laboratory professionals, one question lingers: Will dark labs be an interim antidote to staffing shortages, or a sustained fundamental shift in how patient testing is conducted?

### Only time will tell.

What's certain is that an ever-evolving test menu for patients and their clinicians will place a greater burden on physicians if fewer laboratory professionals are available for consultations. What physicians want are clinical partners and greater access to skilled professionals whose clinical insights help inform their patient care decisions.

To avoid losing the human touch that is underscored in these survey findings as essential to physicians, the mission now is to motivate a new generation of laboratory professionals to enter the field.



## Methodology

### 408 Physicians

On behalf of Siemens Healthineers, a survey of physicians practicing in various specialties in the United States was conducted by the YouGov analysis institute to quantify physicians' viewpoints about the value of laboratory testing.

Specialties were identified and categorized into three common types of laboratory testing needs: primary/preventative care, specialty care, and acute care.

Total sample size was 408 physicians. Fieldwork was undertaken between June 6–12, 2025. The survey was carried out online. The figures are unweighted.

### 1,000 Patients

Separately, a survey of 1,000 U.S. patients, qualified by having had laboratory testing done within the past two years, was conducted during the same timeframe to obtain the patient perspective. The figures have been weighted and are representative of all U.S. adults (aged 18+). Data was weighted according to the dimensions of gender, age, race, education, and geography based on an ideal weighting from census data, or if not available, from industry accepted data.

Both surveys were collected on the YouGov Panels, where each member agreed to participate in online interviews and had received an email invitation with a link to the survey.

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