

Hospital-owned labs Reducing costs, boosting

revenue, improving care

How hospitals can generate long-term financial and clinical value by maintaining their own laboratories



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Executive summary

In some form or fashion, most (92%) American hospitals have an internal lab. But whether they maintain ownership of that lab can depend on several factors, not the least of which includes pressure from rising healthcare expenses.

With a 17.5% jump in costs from 2019 to 2022, many hospital leaders are looking for ways to offload expenditures by selling their lab operations to purchasers outside the hospital. Although these transactions may bring an infusion of revenue in the short term, over time, they might not be the best choice for hospitals or the communities they serve.

That's because not only can selling the hospital-owned lab in the name of cost control cut off a potentially lucrative revenue stream, but it can also potentially undermine clinical care, transparency, and cross-discipline coordination. By contrast, a hospital-owned lab supports data control, patient journeys, and clinical workflows — and if optimized well, can turn into a powerful and lasting data and revenue engine for the health system.

In this white paper, we'll explore how. Sharing the insights of Mayo Clinic Laboratories experts as well as examples from hospital collaborators, this resource aims to help readers learn:

- How hospital-owned labs deliver clinical value that can meaningfully impact patient experiences and outcomes.
- The cost-benefit calculus of insourced lab services across revenue and expenses.
- Best practices to cultivate and expand a hospital lab and lab outreach program.



Understanding the clinical value of hospital-owned labs

Labs have a tremendous bearing on medical care. According to the Centers for Disease Control and Prevention, 70% of care decisions are informed by lab testing. For hospital-owned labs, that represents a rich, robust data trove that not only generates case-specific knowledge improving a single person's care, but also collective insights that improve care for everyone.

William Morice II, M.D., Ph.D., CEO and president of Mayo Clinic Laboratories, says such lab-informed knowledge creation forms over time — and can be dependent on a lab's physical proximity to the facility. The more a lab starts to physically disassociate from the hospital, the more those opportunities for clinical knowledge building tend to break down.

"Pathology and laboratory medicine is a highly consultative practice," Dr. Morice says. "I spend a lot of my time with other Mayo Clinic physicians talking about their case, talking about their patient, talking about the best way to use the test. All of that knowledge is created because we're integrated in the hospital environment."

When lab specialists are readily available to consult on timely matters such as test ordering and interpretations, patients have been found to benefit. For example, one survey among infectious disease physicians found that nearly 9 in 10 respondents considered on-site lab services critical for diagnostic reporting and collaboration with other specialists. Another study suggested that having an onsite lab service might help avoid delays in identifying emergent issues such as sepsis. More broadly, each day that lab results get delayed increased the risk of higher length-of-stays by 13.2%.

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infectious disease physicians considered on-site lab services critical for diagnostic reporting and collaboration with other specialists Integration of the lab within the hospital can also deliver more global clinical impact beyond a single patient. The consultation inherent in on-site labs can help to educate physicians as part of a feedback loop that systemically improves clinical workflows and lab stewardship over time. Research has found that physician satisfaction may also be improved with an insourced model, likely because of these many factors.

According to Jane Hermansen, manager of Outreach and Network Development at Mayo Clinic Laboratories, these clinical impacts are a matter of controlling the laboratory diagnostics:

"And 'controlling' is an important word because when you are just buying a laboratory test, you don't have control over it," she says. "But when you're owning your own laboratory, you control it. That means you have influence over the technology that you're using. You have influence over the quality that's being delivered. You have influence over the turnaround time in the overall service. When a hospital laboratory owns and controls their diagnostics, they can align it with the clinical practice of their organization."



As hospital leaders approach future planning for their internal labs, keeping a pulse on regulations — including the FDA's recent final rule on laboratory-developed tests8 — could pose a challenge. Collaborating with trusted partners like Mayo Clinic Laboratories can give labs the consultation and confidence they need to embrace their lab's clinical value, compliantly. With the right support, hospitals can ensure their labs keep the right tests in-house to drive revenue while relying on a quality reference lab for esoteric testing. Then, you'll have a dedicated resource for navigating future regulatory challenges as well.



Treating internal labs as a revenue generator

Clinical benefits of hospital-owned labs notwithstanding, many leaders still choose to sell their operations to an external buyer. The immediate cash infusion of that transaction may be able to support bottom lines temporarily, but at what cost?

"When that seductive number lands on a CEO's desk, short-term, the deal can make sense," Hermansen says. "But if you're running a lab like a business and have the metrics to support it like a business, that same CEO might find that letting the lab go is not in the hospital's best long-term interest."

The problem is that the laboratory can often fail at telling its own story, which includes not just the clinical impact of the lab, but also its financial solvency. Because indeed, the internal lab should be viewed not as a cost center, but rather, as a sustaining opportunity to cut costs and grow revenue.



From a cost standpoint, while selling can cut lab operation expenses, it can also come with trade-offs involving unexpected test price hikes and fees, among other financial surprises. By contrast, keeping labs internal may help test costs stay more predictable and orders more purpose-based, an important advantage of maintaining ownership. These effects were recently explored in a Texas A&M study that found that by terminating joint venture arrangements, two hospitals reportedly saved \$1 million to \$4 million in one year.⁹

Other financial benefits of the internal lab are more closely tied to its role as a profit generator — thanks in large part to the lab's influence hospital-wide. According to Medicare Cost Report data provided by Definitive Healthcare, the lab ranks as a top-three driver of outpatient gross charges for hospitals. Further, labs with comprehensive lab outreach programs — meaning, those that serve the greater community — contribute up to 20% of outpatient gross charges.¹⁰

By investing in the internal lab and shifting the mindset of it being a sunk cost, hospitals can capture or recapture that revenue potential in multiple ways — from better workflows and data that drive operational efficiencies to improved community trust that increases patient volumes.

One example is Kootenai Health in Northern Idaho and the inland northwest. With no on-premises option for outpatient or community testing, physicians at Kootenai had concerns about their level of control and ability to follow up on outpatient issues. After standing up an outreach laboratory, Kootenai experienced daily patient volumes exceeded by 50% to 100%.¹¹

"We have a lot of interest from the community with independent practices that want to send to us instead of a commercial lab where their specimens are transported hundreds of miles away to be run," says Angela Vetch, director of laboratory services at Kootenai Health. "We can provide better turnaround time and have results in the patient's chart when they come to us, as the local hospital."





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Angela Vetch Director of Laboratory Services Kootenai Health An important contributor to a lab's profitability across those dimensions is that using the lab makes the most of a hospital's existing capacity. Hermansen explains:

"The hospital lab has to be there 24/7 to take care of the inpatients and the emergency department," she says. "So when you bring these additional volumes in, you're using existing staff and equipment more effectively. That's why it's so profitable and why our outreach clients see between a 30 to 40% contribution margin. There truly is no other service line in an organization that provides that level of profitability."

These economic benefits of the internal lab have also been found to be long-lasting. In a study observing 10-year financial outcomes after New York-based Northwell Health kept its lab hospitalowned, the health system saw annualized rates of revenue growth of 16%. This was in addition to other outcomes that were realized, such as innovations in clinical programming, improvements in community reputation, and the ability to support other distressed facilities.¹²

Even so, it's not just lab-related revenue that hospital-owned labs are ultimately generating. Because the lab is the so-called "tip of the spear" for other outpatient service lines, hospitals stand to support patients needing those other services as well. By contrast, if a patient starts out with their lab testing done outside the hospital system, they may be more inclined or accustomed to going elsewhere for other ancillary services, too.

Another factor to consider is the impact of value-based reimbursement, which could make the financial benefits of the hospital-owned lab even more apparent.¹³ That's partially owing to the longitudinal data inherent in managing a patient throughout their care journey, Hermansen adds.

"When you look at value-based medicine where we are paid for outcomes [and not services], we're not paid by pieces and parts of healthcare anymore," she says. "So what you want to do is make sure you're owning and controlling your data and diagnostics and use that data to make good clinical decisions about your patients. Based on your experience and your data, you can model how you're going to handle other patients — giving you the confidence to accept reimbursement rates."

"The other piece is that for the hospital laboratory with a strong lab outreach program, they're providing that access for those patients so they're not leaving," Hermansen adds. "If they leave the system and get their testing done at an independent laboratory, in a bundled payment environment, it's a purchased service, so they have to buy it and now it's coming out of that capitated payment. It's always going to be less expensive and more efficient for you to make it versus buying it from the outside and allowing that erosion of your capitated dollars."



Setting internal labs up for long-term success

If hospital-owned labs are to make the most of their clinical and financial promise, doing so requires a change of mindset that considers internal labs a lucrative revenue stream, not just an overhead cost. This mindset shift represents a cultural and institutional change, one that many systems have had to embrace.

Midwest-based Boone Health confronted exactly that mindset shift while collaborating with Mayo Clinic Laboratories to expand volumes through lab outreach.

"Several years ago, I think the (laboratory) was looked at as a cost center versus a revenue center," says Drew Wilkinson, director of laboratory, ambulance and emergency services at Boone Health. "When I came into this role and we started growing the outpatient work, that's where we really started communicating with our senior executive team to show the value in outpatient lab services."

That ongoing communication and feedback loop between hospital and lab leadership is critical to conveying the importance and value of the hospital-owned lab. By understanding what actually happens in the lab and its wide reach across many facets of patient care — the most patient touchpoints of any service line, that is¹⁴ — hospital leadership can better recognize its financial and clinical contributions.

But if lab leaders aren't regularly and proactively reporting key metrics to leaders (such as net revenue, profitability, and contribution margin) those financial impacts might not be known otherwise, especially in a bundled payment environment.

This is why communication should go both ways. While hospital leadership should regularly solicit the feedback of lab staff, give them more exposure, and generally empower them to champion the lab's importance and impact, lab leadership should also work to elevate their own presence and metrics-driven value story within the larger health system.

"The solution is actually both roots up and tops down — meaning those working in the laboratory also need to get engaged with the care teams to understand what's needed from the lab," Dr. Morice says. "Is it performing correctly? Are there new tests that might be needed? You really have to show you're engaged with your providers at the grassroots level."

Reviewing test volume data and investing in provider education to cultivate relationships between clinicians and the lab can support these communication efforts, while also reducing unnecessary testing and cost per diagnosis. Because again, an important advantage to the hospital-owned lab is the control of its own robust data that can be used to optimize global workflows beyond individual patient cases.



Strategic partnerships are another ingredient for the success and solvency of the hospital-owned lab. Potential partners could include other suppliers — to help strengthen supply chain resiliency — as well as other health systems. The latter, while seemingly counterintuitive, is something Hermansen equates to a "farmer's market mentality."

"If you have a group of people who are working together for a common purpose — local patient care — you're going to be stronger," she says, adding that these partnerships have multiple benefits, from producing economies of scale that support purchasing to creating a centers of excellence model that unlocks efficiencies surrounding lab capabilities. "You could have one group perform toxicology testing, another perform advanced molecular testing, and another do microbiologic testing. So now you have these centers of excellence, and what you're doing is you're keeping those dollars in that community. If you know who's doing the testing, and they're part of your community, you just feel better about it."

Lastly, consider working with a partner like Mayo Clinic Laboratories for consultation and other tools that help drive lab growth. Through sales training, outreach coaching, and guidebooks across specialized topics such as call center management, home phlebotomy programs, dedicated logistics and more, Mayo Clinic experts support labs throughout their journeys to recognize, build, and maintain their own value story.

"We have this whole library of resources based on the experience that Mayo Clinic Laboratories has had as a reference lab for over 50 years," Hermansen says. "We're privileged enough to bring our subject matter experts and our resources to help our clients be competitive labs in their own rights."



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Jane Hermansen Manager of Outreach and Network Development at Mayo Clinic Laboratories



It's your lab. Own it.

Rising healthcare costs have put many hospitals in an uncertain financial state. While the prospect of selling lab operations may seem attractive in the short term, doing so potentially compromises the clinical, financial, and community value of the hospital-owned lab. However, by elevating the presence of the lab and monitoring and supporting its business and clinical potential, leaders can set their labs up for long-term success. If you'd like to learn more about how Mayo Clinic Laboratories can help, visit mayocliniclabs.com/customer-service/request-info.html to get started.



Mayo Clinic Laboratories, the global leader in turning test results into clinical answers, provides advanced testing and pathology services for 3,400 healthcare organizations in partnership with Mayo Clinic's Department of Laboratory Medicine and Pathology. Mayo Clinic Laboratories offers more than 4,400 tests and pathology services and performs more than 26 million tests annually.



https://revcycleintelligence.com/news/transforming-the-hospital-laboratory-into-a-profit-center

https://www.aha.org/press-releases/2023-04-20-new-aha-report-finds-financial-challenges-mount-hospitals-health-systems-putting-access-care-risk

https://www.cdc.gov/csels/dls/strengthening-clinical-labs.html

https://academic.oup.com/pipids/article/9/3/293/5467368

https://www.sciencedirect.com/science/article/abs/pii/S0732889313002034

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5956538/

https://www.sciencedirect.com/science/article/pii/S237428952100292X#:~:text=Impact%20on%20Physician%20Satisfaction

https://www.sciencedirect.com/science/article/pii/S237428952100292X#:~:text=Impact%20on%20Physician%20Satisfaction

https://www.sciencedirect.com/science/article/pii/S237428952100292X#:~:text=Impact%20on%20Physician%20Satisfaction

https://news.mayocliniclabs.com/2021/08/20/hospital-outsourcing-often-prioritizes-profit-over-patients/

https://news.mayocliniclabs.com/2024/02/12/kootenai-health-recapturing-their-market-through-precision-coordination/

https://mervid.an.allenpress.com/aplma/article/143/12/1517/433827/Northwell-Health-Laboratories-The-10-Year-Outcomes

https://www.linkedin.com/pulse/think-twice-before-selling-your-hospital-outreach-lab-laughman/

¹²https://www.linkedin.com/pulse/think-twice-before-selling-your-hospital-outreach-lab-laughman/
¹⁵https://www.nasdaq.com/articles/untapped-potential-how-hospitals-can-get-more-value-from-labs

¹⁶https://www.fda.gov/news-events/press-announcements/fda-takes-action-aimed-helping-ensure-safety-and-effectiveness-laboratory-developed-tests