

LEVERAGE THE LAB FOR A HIGHER PERFORMING HEALTH SYSTEM COST SAVINGS

IT'S A CHALLENGING TIME FOR HEALTH SYSTEMS AND LABORATORIES.

Even before the pandemic, a sustained rise in chronic illnesses, increased consumer access to healthcare, and new testing methodologies were driving laboratories to be more agile in adjusting to new operational demands. Laboratories worldwide are struggling to meet staffing needs, while changes in reimbursement and shrinking budgets continue to drive health systems and laboratories to reduce costs. What this all adds up to is that health systems are being challenged to do more with less. Through our work with laboratories and health systems around the world, Abbott has gained valuable insights about how to improve lab value – even in today's increasingly complex healthcare environment. Looking beyond the current healthcare challenges, growth opportunities exist.

Maximizing these opportunities begins with evolving the role of the laboratory beyond traditional performance measures such as throughput, turnaround time and variable cost per test. Forward-thinking health systems are taking a holistic view of the total value a laboratory can bring to the healthcare equation.

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THE HEALTHCARE LANDSCAPE IS EVOLVING



Greater information access



Hospital consolidation



Reimbursement cuts squeezing budgets



Increasing patient volumes



Staffing shortages



New payor models

WHEN LEVERAGED CORRECTLY, THE CLINICAL LABORATORY CAN GREATLY ASSIST HEALTHCARE SYSTEMS IN ACHIEVING **OPERATIONAL EFFICIENCY** AND **INTEGRATED CLINICAL CARE EXCELLENCE**.

In fact, **70% of hospital executives** interviewed in a survey expressed their belief that the laboratory can have a significant impact on patient satisfaction.¹



ABBOTT'S HOLISTIC APPROACH TO ACHIEVING MEASURABLY BETTER HEALTHCARE PERFORMANCE

OPERATIONAL EXCELLENCE & INTEGRATED CLINICAL CARE

Your roadmap to better health system performance starts here – with our whole picture perspective on maximizing health system performance.

CORE COMPETENCIES

OPERATIONAL EXCELLENCE



The performance of your people, processes and technology to successfully deliver services.

- **Customer Centricity** How well you know and serve your customers.
- **Quality Management** Highest performance at lowest errors.
- **Performance Management** Doing the right things and doing things right. Efficiency and effectiveness.
- Network Optimization How efficiently you are leveraging the synergies and economies of scale across the system.

INTEGRATED CLINICAL CARE



The level of alignment and execution across your health system stakeholders to deliver improved clinical care outcomes.

- **Analytics Center** How easy it is for you to access, share and utilize data for integrated care.
- **Execution of Integrated Care** How effective you are at implementing an integrated approach.
- Advice Center How effective you are at leveraging data and people to deliver actionable insights for decision making.
- **Population Health Management** The level of integration across your stakeholders to provide preventative care and deliver improved population and financial outcomes.

FOUNDATIONAL COMPETENCIES



• Sustainability

How well you use systems to ensure long-term sustainability and drive shareholder value.

Innovation

Your organization's appetite to implement change (leveraging people, processes and technology) to evolve and improve your performance.

ENHANCING LABORATORY PERFORMANCE AND VALUE

FOUR KEY FOCUS AREAS

Today there is more pressure on laboratories than ever before. Delivering on-time, accurate results to physicians is no longer enough to remain viable. Laboratories must not only contribute to positive patient outcomes at the lowest possible cost, but they must also deliver value above and beyond the laboratory's traditional scope of work. Through the exploration of four focus areas: **Patient Care Pathways, Early Disease Detection, Human Resources & Staffing and Cost Savings,** a strategic roadmap can be developed to achieve operational excellence and heighten the level of clinical care across your health system.





Finding new ways to help health systems and laboratories reduce expenditures while increasing operational efficiency and improving the quality of integrated care.



MARKET DATA/TRENDS

Across the globe healthcare systems continue to struggle with financial sustainability:

- In the UK, the underlying deficit for hospital trusts was **5 billion pounds in 2018.**²
- Many health systems are operating on razor thin margins that are declining. For example, in the Netherlands, top hospitals are achieving operating margins of just 1.8% – even after dramatic cost optimization initiatives.³
- In 2017, the Protecting Access to Medicare Act (PAMA) was passed in the U.S, aiming to drive reduced laboratory spending by reducing testing reimbursement up to 15% YOY.⁴

Why This Matters

Today's health systems face an aging population, increasing patient volumes and rise in chronic illnesses, all leading to growing costs. Dramatic change is needed to address budget and reimbursement challenges across the globe. The laboratory can support cost reductions by becoming more efficient. More importantly, the lab can be leveraged to reduce the overall cost of care by aiding in patient diagnosis and monitoring.

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PROVEN SOLUTIONS TO CONSIDER

ABBOTT'S END TO END SOLUTIONS enables

laboratories to reduce expenditures within their own four walls and to a great degree throughout the entire health system. Within the lab, savings have been realized through more efficient supply chain management, reduced consumption of consumables and decreased waste. The ripple effect of laboratory cost savings can significantly impact the overall cost of care, with contributions being realized in reductions in length of stay and improved patient management.

Laboratory Savings

As testing menus continue to grow, laboratories are being tasked with managing increasingly complex supply chains. **Saint Francis Hospital,** a 1,112-bed not-for-profit health system, implemented Abbott's AlinIQ IMS to support improved management of inventory through Radio Frequency Identification (RFID) and Electronic Data Interchange (EDI) technology. Automating inventory management led to a reduction in nonvalue add tasks, expired products and unnecessary shipping costs that **saved \$169,000 annually**.

\$68,300

per year savings from reduced inventory error rate⁶

\$38,600 per year savings in cycle count costs⁶

\$35,100

per year savings from drop in handling time⁶

\$26,600

per year savings by reducing overnight shipping⁶



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In Beirut, Lebanon, Abbott's End to End solution helped **Clemenceau Medical Center (CMC)** achieve significant laboratory cost savings through increased operational efficiencies.

Improved assay quality and reduced aspiration volumes contributed to a

40% decrease in Quality Control consumption.⁵ Additionally, time saved across the laboratory (inclusive of reduced handling of reagents and samples and less time spent on routine maintenance) led to more efficient resource utilization - reducing overtime expenses by 75%.⁷

75% decrease in overtime expenses

Health System Savings

The laboratory can play a key role in ensuring the prudent treatment of patients. **The Centers for Disease Control and Prevention (CDC)** estimates that 30% of all antibiotic prescriptions are unnecessary.⁸ Health systems that employ an evidence-based procalcitonin protocol can guide the effective and appropriate use of antibiotics. For example, Swedish Hospital (formerly Swedish Covenant Hospital) in Chicago found that by implementing a standardized, evidence-based PCT criteria in concert with an antibiotic stewardship program led to a number of success factors:

Antibiotic Stewardship Program Success Factors

- Procalcitonin is a proven biomarker for antibiotic stewardship in a variety of settings including the ED, ICU, and NICU (Neonatal ICU).^{10,11,12}
- Strategies that employ evidence-based pathways using procalcitonin for antibiotic stewardship have shown to be both safe and cost-effective.^{9,10,11}
- Interdisciplinary, cross-functional teams are essential in ensuring activation of evidence-based pathways for appropriate antibiotic therapy and the betterment of health in patients with infection and sepsis.⁸

The Royal Wolverhampton National Service was able to expedite patient care through the implementation of a **new clinical pathway** for patients with suspected acute coronary syndrome. Specifically, low risk patients were identified using clinical assessment and high sensitive troponin values on arrival, enabling a discharge protocol that reduced the number of low " risk patients unnecessarily admitted while assuring patient "......" safety. One outcome of this initiative was a reduction in length of stay (LOS) which **reduced expenditures by £788,000.**¹³ 2.8% increase in the number of patients safely discharged

reduced total costs by \$2,759(US Dollars)⁹ per ICU patient with sepsis

new clinical pathways



KEY TAKEAWAYS

Laboratories have significant opportunity to automate manual activities and **reduce unnecessary waste** by adopting holistic solutions. 2 Health systems and laboratories can invest in initiatives that not only reduce costs but also improve patient care. 3 Having the right solution in place can help laboratories decrease expenditures through reduced staffing expenses (overtime), quality control costs, utilities, consumables and biohazardous waste.



START HERE Key Questions for Your Healthcare Partner

- How do we identify the most impactful areas for cost reduction?
- Are we able to reduce costs while broadening our quality of care?
- How should we measure the success of these initiatives?

FORMULATING YOUR TRANSFORMATION PLAN

Pulling It All Together



A multi-faceted approach is needed to address increasingly complex healthcare pressures.



Taking measures that address both operational excellence and integrated clinical care to enable health systems is the key to achieving an effective multi-faceted approach.



All efforts must be strategically designed in order to position health systems to improve the level of integrated clinical care to patients at lower costs.

This Is Where It Begins

Transformative change can start with one great conversation. To initiate that conversation, here are three overarching questions to explore internally and with your lab diagnostic partner:

- How do I develop a three-year lab strategy that ties into corporate metrics, such as patient satisfaction and lower readmission rates?
- What is the best way to facilitate collaboration with physicians on test results and complex cases to help deliver clinical insights for better outcomes?
- How do I aggregate data from the lab to generate insights and proactively share those insights across functions?

About Core Diagnostics at Abbott

At Abbott, we're committed to helping you connect the performance of your laboratory to the performance of your healthcare institution. We align people, processes and technology to create personalized solutions tailored to your unique challenges. Our resourceful advocates can help you achieve measurably better healthcare performance through harmonized systems and intelligent insights.

Connect with us at corelaboratory.abbott and on LinkedIn at Abbott | Diagnostics

SOURCES

- Abbott-sponsored study conducted by Ipsos Healthcare across 14 countries amongst hospital-based physicians, clinical laboratory directors, hospital leaders and patients. 2017. Detail available upon request.
- 2. Full Fact Team. Spending on the NHS in England. Full Fact. Published July 9, 2019. Accessed June 3, 2021. https://fullfact.org/health/spending-english-nhs/.
- Allen S. 2020 Global Healthcare Outlook. 2019. https://www2.deloitte.com/content/dam/Deloitte/ za/Documents/life-sciences-health-care/za-2020-global-health-care-outlook.pdf. Based on Deloitte analysis of hospital annual reports.
- https://www.cms.gov/Medicare/Medicare-Feefor-Service-Payment/ClinicalLabFeeSched/ PAMA-Regulations. Accessed May 24, 2021.
- Saint Francis Health System About Us. https://www. saintfrancis.com/about-us/. Accessed October 11, 2021.
- 6. Data on file at Abbott.
- Case Study: Clemenceau Medical Center (CMC), Achieving Operational Excellence Through Improved Resource Utilization.

- https://www.cdc.gov/media/releases/2016/ p0503-unnecessary-prescriptions.html.
- 9. Personalized Antibiotic Therapy for Reduced Inappropriate Exposure to Antibiotic, Swedish Covenant Hospital, Chicago, IL
- 10. Balk RA, et al. Effect of Procalcitonin Testing on Healthcare Utilization and Costs in Critically Ill Patients in the United States. *CHEST*. 2017;151(1):23-33.
- Stocker M, et al. Procalcitonin-guided decision making for duration of antibiotic therapy in neonates with suspected early-onset sepsis: a multicentre, randomised controlled trial (NeoPIns). *Lancet*. 2017;390:871-881
- Zhou H, et al. The risk stratification and prognostic prediction value of procalcitonin and clinical severity scores on patients with communityacquired pneumonia in emergency department: Prediction value of procalcitonin and severity scores for CAP. Am J Emerg Med. 2018 Mar 21. pii: S0735-6757(18)30242-0. doi: 10.1016/j.ajem.2018.03.050.
- Case Study: Lab Toledo, Achieving Strategic Agility with the Abbott Total Solution.

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