How Lab Stewardship Will Help Reignite Testing in the Post-COVID Era

With the pandemic pressuring testing demand, lab stewardship programs can help with decision making and actionable insights to make the right testing decisions for patients, leading to better quality outcomes.

By Lee Hilborne, MD, MPH

Lab testing activity represents $73 billion of the $3 trillion spent annually on healthcare in the United States and guides up to 70% of all medical decisions. Improvements in appropriate test selection in compliance with evidence-based guidelines have the power to radically improve patient outcomes and reduce healthcare costs. Additionally, information from the National Academy of Medicine shows that the COVID-19 pandemic disrupted patient care for non-COVID-19 related conditions, including preventative and diagnostic services.

With approximately 80% of physicians seeing an overall drop in patient volumes during the pandemic, physicians and providers across the country have observed firsthand how COVID-19 changed the dynamics of healthcare delivery, shifting patient priorities as people deferred care perceived as less urgent.

Delayed or eliminated care may place patients at risk for adverse outcomes. Gaps in care can result in unfavorable outcomes for patients who, if identified earlier, could have been treated more effectively. Ultimately, we need to identify these individuals and get them back into care to diagnose conditions, from cancer to heart disease to prediabetes and chronic kidney disease.
before they experience advanced disease, and laboratory stewardship can help.

The COVID-19 Pandemic’s Effect on Lab Test Volumes

Recently, Quest Diagnostics collaborated on a study published in *Archives of Pathology & Laboratory Medicine* aimed at identifying opportunities for laboratory test stewardship to help close gaps in care created by the COVID-19 pandemic. The study examined volume at Texas Children’s Health System (TCHS, Houston, TX) in the hopes of understanding the pandemic’s impact on the healthcare system using representative laboratory tests. Results identified gaps in care that require a coordinated policy and health system response.

During March to June 2020, the most restrictive “stay-at-home” period in Texas, hospital admissions and outpatient visits decreased by 17% and 41% respectively, compared to the corresponding period in 2019. Most laboratory tests initially declined as communities locked down and elective surgeries were cancelled. While some test types rebounded quickly, others never completely recovered, a fact that is worrying for physicians and providers.

In the context of the pandemic, results show a threat to patients in underuse of testing, particularly for tests that are essential for screening and monitoring patients for chronic diseases. An effective laboratory stewardship initiative can help identify and close these gaps.

By empowering health systems to optimize laboratory testing and deliver high-value care, Quest Lab Stewardship enables improvements in patient care through better laboratory utilization.

The Ins and Outs of Lab Stewardship

Quest introduced a lab stewardship service with hcl in 2019. The service uses behind-the-scenes technology that layers over a health system’s existing LIS and other technologies. It helps the hospital lab director and other laboratory professionals, for instance, drive quality through data, compliantly sharing with doctors and healthcare leaders how their practice may compare with medical guidelines and other parameters that are customized by the hospital, discouraging the use of lower-value or less-proven tests.

Fundamentally, this helps physicians order the right test for the right patient at the right time. It provides practice feedback regarding situations where tests are inappropriately repeated and improves transparency, providing better patient care. By improving technology and data management, pathologists and other laboratory professionals can more easily anticipate needs and help their medical colleagues deliver better care.

Quest’s lab stewardship program can help laboratory leaders visualize population care gaps and consult with medical staff to identify areas of possible concern. Too often, an inappropriate test is selected, redundant tests are ordered, or a needed test is omitted, and with lab tests guiding important medical decisions, improvements in appropriate test selection in accord with evidence-based guidelines have the power to radically improve patient outcomes and reduce healthcare costs.

The lab stewardship program also goes beyond basic reporting and empowers physicians, lab administrators, and medical leadership with real-time, actionable insights to help drive targeted improvements in overall test utilization, lab operations, and patient outcomes. The insights provided can help labs run more efficiently by organizing data, providing monitoring in real time, and improving patient care and the physician experience while reducing lab spend.

Still, lab stewardship is about more than lab testing and lowering costs associated with over-testing. It is about helping health systems use lab services efficiently to deliver appropriate care while preventing the downstream consequences from unnecessary, costly procedures. Most importantly, it empowers laboratory leaders to increase contributions to and recognition by their organizations.

When executed effectively, a laboratory stewardship program, particularly focused around care during and after the pandemic, will position laboratory professionals as healthcare leaders with a commitment to assure appropriate, equitable and efficient care.

Corroborating the Data

Aside from data related to the study on test volumes at TCHS in Houston, Quest Diagnostics has also observed a decline in testing and treatment for other conditions through its landmark Health Trends program. A new Health Trends study authored by researchers from Quest Diagnostics and the CDC reveals an approximately 40% decline in the number of positive hepatitis C diagnostic test results and medication prescriptions in July 2020 compared to July 2018/2019, attributed to patients not accessing healthcare services for poten-
tially life-saving treatment and care during the early months of the pandemic.  

An additional Health Trends study found that STI testing dramatically declined during the COVID-19 pandemic and has never fully returned to pre-pandemic levels. Results showed STI test volume declined between late February 2020 to early April 2020 by 40%, and that, for both chlamydia and gonorrhea, positivity rates remained higher than baseline 2019 levels by the end of the study.

We Need to Get Back to Care

Across the board, patients have been delaying critical care since March of 2020 COVID-19 was declared a pandemic. It is imperative that we get people back to care and seeing their physicians as soon as possible, so that any conditions that may benefit from early diagnosis are discovered and treated quickly. While this may seem like a daunting task, laboratory stewardship programs can help labs and healthcare professionals optimize data and, ultimately, improve care.

Patients everywhere deserve the best possible care, and that starts with broadening access to diagnostic insights. With lab tests guiding important medical decisions, improvements in appropriate test selection in accord with evidence-based guidelines have the power to radically improve patient outcomes and reduce healthcare costs.

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Past President of the American Society for Clinical Pathology (ASCP) and chair of ASCPs Effective Test Utilization Subcommittee (Choosing Wisely), Hilborne received his Medical Degree from the University of California, San Diego and his Masters in Public Health from UCLA. He is certified by the American Board of Pathology in Anatomic and Clinical Pathology and is certified as a Diplomate in Laboratory Management by the Board of Certification, American Society for Clinical Pathology.

Hilborne directed the UCLA Patient Safety and Quality Center and for ten years was Director of Quality Management and Associate Director for UCLA Healthcare. He continues working with UCLA to address quality and reimbursement issues. In addition to being a member of the ASCP, he is also an active member of the College of American Pathologists.

REFERENCES
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