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Making the Learning Health System a Reality

Transforming the Healthcare System Through
Apervita's Collaboration Platform & Solutions

"The challenges highlighted in the current approach to quality measurement were known prior to the COVID-19 pandemic… The health care system should prevent being in a situation with a poor understanding of the quality of health care being delivered, regardless of whether there is a public health crisis."

J. Matthew Austin, PhD & Allen Kachalia, MD, JD
JAMA, The State of Health Care Quality Measurement in the Era of COVID-19; June 25, 2020

Now, more than ever, the healthcare industry is in need of cost-saving, efficient systems focused on high-quality care for patients. In recent years, the Learning Health System (LHS) has grown in popularity and emerged as a powerful framework for improving healthcare delivery. The National Academy of Medicine (NAM) (formerly the Institute of Medicine [IOM]) defined the LHS as *"one in which science, informatics, incentives and culture are aligned for continuous improvement and innovation, with best practices seamlessly embedded in the care process, patients and families active participants in all elements, and new knowledge captured as an integral by-product of the care experience."* The goal of the LHS is to systematically integrate data and experience with the most up-to-date evidence-based guidelines so that patients receive higher-quality, safer and more efficient care. Apervita's mission and strategy intentionally align with the goals of the LHS: Our Quality Measurement, Value Optimization and Clinical Intelligence Solutions transform quality measurement, value-based payment and care delivery through our trusted collaboration platform. When combined, these solutions enable the LHS and work together to continuously make healthcare smarter, ultimately improving patient care.

Background of the Learning Health System

In the late 90s and early 2000s, two famous research studies were published. One study, *To Err is Human,* found an estimated 44,000 to 98,000 Americans may die annually due to medical errors, ranking them as a top ten leading killer. The second study, *Crossing the Quality Chasm,* found there is a 17-year lag between when a health scientist learns of a new healthcare best practice and when that practice is implemented by practitioners. These studies highlighted major inefficiencies in our healthcare system with the chief problem being the lack of timely integration of healthcare best practices. This deficit of continuous learning has grave consequences on health outcomes. Amongst wealthy countries, the U.S. healthcare system ranks highest in spending and lowest in health outcomes. Sadly, the United States performs well below other countries in common metrics such as life expectancy, infant mortality and unmanaged diabetes.

As a follow-up to their studies in the early 2000s, the NAM developed the concept of the LHS, which provides a framework for shifting the U.S. healthcare system into one that provides the best healthcare choices for every patient and provider.

Apervita's Role in Enabling the Learning Health System

Apervita believes integrating our core solutions that incentivize value, promote transparency and integrate best practices, with support from machine learning, data collaboration and knowledge assets, will enable the Learning Health System as defined by the NAM and other industry leaders. Apervita's platform and solutions lay the groundwork for the advancement of interoperable, near-frictionless data and knowledge flow, allowing for better-informed decisions that lead to saving lives, improving health and transforming our healthcare system into one that rapidly learns and continuously improves. Apervita's innovative solutions include:

Apervita's Collaboration Platform: Our scalable platform is intended to power our core solutions that drive trusted collaboration between payers and providers. Apervita's platform leverages unique architecture purpose-built for collaboration and provides the control necessary to support a variety of healthcare use cases.

Quality Measurement: Apervita is leading the industry with our next-generation digital Quality Measurement Solutions, which leverage our proprietary Clinical Quality Language (CQL) engine and the industry's first-of-its-kind fully integrated, standards compliant digital build environment. We eliminate the "black box" approach and create transparency so all stakeholders are aligned.

Value Optimization: Our Value Optimization Solutions promote adoption of value-based contracts and alternative payment models with a single source of truth for payers and providers. This improves communications and creates transparency in regards to financial and quality performance against contract terms.

Clinical Intelligence: Apervita's Clinical Intelligence Solutions deliver clinical insights such as computable clinical practice guidelines (CPGs), clinical pathways, care gap prevention and analysis for compliance to best practices. This gives providers access to better information so they can more effectively provide care tailored to each patient.

Enabling the Learning Health System

Making continuous learning in healthcare a reality
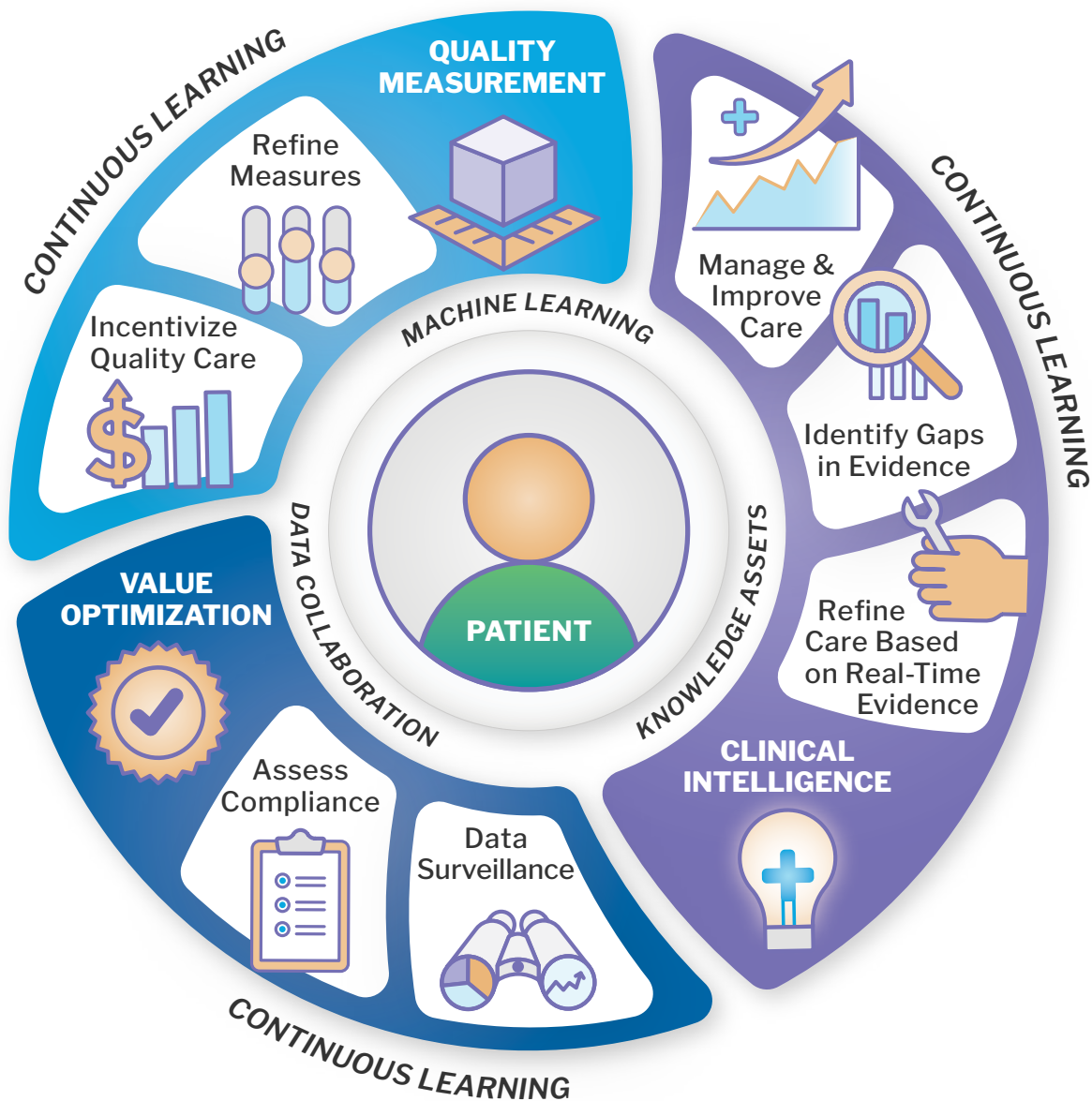
Apervita's strategy integrates our solutions and platform to enable the Learning Health System, which promotes continuous learning to ensure improved patient care.

Why Apervita Believes in the Learning Health System

Clinicians and Patients Should be Equipped With Comprehensive Data

Apervita understands the ability to use all forms of healthcare data (structured and unstructured, clinical, claims, social determinants of health, behavioral, laboratory, patient reported data, etc.) is vital to the progression of the U.S. healthcare system. The industry has no shortage of data but applying that data in a timely, meaningful manner has yet to be achieved effectively. When fully implemented, the LHS will continuously gather and apply data at the point of care, simultaneously creating and utilizing a longitudinal patient record. These capabilities will also streamline mandatory data-sharing, compliance and reporting such as electronic case reporting and quality measurement. Interoperable data is a necessity for the LHS to support clinicians in their decision-making, but it's also necessary to support patients with medication adherence and information to encourage the adoption of a healthy lifestyle. Interoperable, near-frictionless data streams are a core component to continuously learn and improve patient care. Without it, the LHS is not possible.

Patients Deserve First Time Quality

Quality measurement today is retrospective in nature. Data lags and delays in calculating measurements result in frustrated practitioners expected to take action on stale, outdated results (some outdated by over six months!). When fully-enabled, the LHS will enable clinicians to achieve quality the first time, rather than receiving their report card six months later. Under the LHS ecosystem, quality measurement will no longer be a retrospective regulatory activity, but rather a prospective opportunity to provide customized, quality care,

Why Healthcare Has Embraced "First Time Quality" From the Manufacturing Industry

The term **"First Time Quality (FTQ)"** was coined by Toyota Motor Corporation when they integrated the lean process into manufacturing. The lean methodology and FTQ has since been widely adopted across industries including aerospace, banking, telecommunications and industrial engineering plants. Lean manufacturing ensures that any production is performed in the right manner the first time and every time so that no re-work is necessary. In the past two decades, healthcare has also employed a version of this concept to ensure quality, efficiency and adherence to best practices in medicine. As healthcare data becomes more interoperable and the LHS is enabled, First Time Quality care will become more important and ultimately save lives by ensuring quality care is delivered to every patient. Providers will be supported with the best possible evidence and will provide FTQ care at the point of care, rather than receiving performance report cards six to twelve months later.

one patient at a time. Patients (and let's face it, we will all be a patient at some point) deserve a healthcare framework that provides dignified care tailored uniquely to each patient throughout his/her lifetime.

It's the Right Thing to Do

For far too many years, the U.S. healthcare system has been severely siloed, resulting in poor outcomes, significant cost and administrative burden. The LHS will put timely and actionable knowledge, based on the real-world experiences of millions of patients, in the hands of clinicians, patients, and all healthcare stakeholders. This will allow for better-informed decisions that lead to saving lives, improving health and transforming our healthcare system into one that rapidly learns and continuously improves. If we implement the LHS, disease surveillance, health system preparedness and accountability for value-based care will increase, while administrative burden will organically decrease. All of these capabilities build on each other, ultimately providing us with a system that can more adequately prevent, detect and respond to public health crises and more equitably protect our most vulnerable.

In 2016, it was reported that physicians spend $15.4B annually to report quality measures and $730.4B every year to treat preventable diseases. Employing a Learning Health System will help increase more informed and more timely decision-making, which will organically decrease spend.

While there are many integrated health networks, a LHS at the national level will require broader thinking and collaboration beyond individual organizations. To realize a LHS, we must have commitment from all stakeholders to leverage interoperable systems, to measure quality using standardized methods, to incentivize value-based care and to provide First Time Quality by using the best evidence available at the point of care. Together, Apervita, payers, providers, specialty societies and other collaborators can make a LHS a reality.

Are you ready to help make the Learning Health System a reality?

Contact us today at **info@apervita.com** or **312.257.2967**

Sources

https://www.pgpf.org/blog/2020/07/how-does-the-us-healthcare-system-compare-to-other-countries

Institute of Medicine (U.S.). Committee on Quality of Health Care in America. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, D.C.: National Academy Press, 2001.

https://www.universityaffairs.ca/opinion/in-my-opinion/closing-17-year-gap-scientific-evidence-patient-care/

https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30203-6/fulltext

Kim, C. S., Spahlinger, D. A., Kin, J. M., & Billi, J. E. (2006). Lean health care: What can hospitals learn from a world-class automaker? Journal of Hospital Medicine, 1(3), 191-199. doi:10.1002/jhm.68

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