

Leveraging AI and New Partners in Healthcare Transformation

How Main Line Health Is Leading the Way

Main Line Health (MLH) is in the midst of real transformation as it responds to the rapid changes of the healthcare industry. President and CEO Jack Lynch is leading the way to ensure that patients and the community receive care at the highest quality and lowest cost.

"We are working as a health system to establish innovative and value-based solutions for the future to continuously improve upon our ability to deliver safe, equitable and affordable care to the community. Performance Excellence 2020 (PE2020) is the centerpiece that connects and guides all of the transformational work,"

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To accelerate PE2020, MLH is harnessing big data, Al and deep learning to impact their ability to deliver safe, timely, effective, efficient, equitable and patient-centered care (STEEEP).

MLH is beginning to use Al and deep learning algorithms to identify unnecessary variations in care as well as advance evidence-based practices that tangibly impact STEEEP metrics. "We are not creating our own Al, we are partnering with the right companies that can take the massive amount of data we have available to provide answers in how to impact STEEEP," says Lynch.





Al is allowing MLH to eliminate time consuming data clean-up which is where most data scientists spend about 50-80%¹ of their time before they can even begin to derive useful insights. "Al and deep learning algorithms that remove data sifting and provide information that directs us in ways to make meaningful changes in care delivery is highly valuable," says Lynch. This allows MLH to focus their time acting on insights found in data that can impact PE 2020.

In the radiology space, MLH is working with Imalogix, a cloud-based AI company that analyzes how imaging is being delivered clinically and operationally. Deep learning algorithms uncover how and where MLH can make improvements that enable systematic improvement of workflow, quality and safety. The Imalogix Platform is continuously learning and highlights specific areas for MLH to focus on that can improve efficiency, decrease variability, and minimize radiation dose to protect patients. This allows MLH to immediately learn if protocols need to be modified or may not be performing properly on certain scanner types, or if there are training opportunities for staff. Side-by-side views of scanners allow easy comparison of volume staffing and utilization to allow MLH to understand

in real time where equipment may be under or overstaffed and if there is unmet capacity to route patients to reduce wait time.

"A large component of delivering affordable and high quality care is centered around eliminating unnecessary variations in care. This is where systems that turn data into information is critical. This allows us to identify the safest and most efficient path as the standard of care and determine if there are deviations from that standard,"

explains Lynch

Imalogix also allows MLH to compare its performance to its peers to assess its clinical and operational performance. Best practices from the Imalogix user network are brought directly to MLH to drive ongoing learning and improvement.

About Main Line Health

Main Line Health® is a not-for-profit health system serving portions of Philadelphia and its western suburbs. It is the recipient of numerous awards for quality care and service, including System Magnet designation, the nation's highest distinction for nursing excellence, 100 Top Hospitals by IBM Watson Health, CHIME's Most Wired Hospitals, the Mid-Atlantic Alliance for Performance Excellence (MAAPE) Award, and is recognized among the nation's best employers by Forbes magazine.



"The insights and guidance provided from Imalogix allow us to continuously improve how we deliver the safest and highest quality care consistently that is both affordable and equitable. This is what attracted me to the Imalogix solution", says Lynch.

Selecting the right partners that can impact STEEP metrics and PE2020 is critical to MLH's success. This can be challenging with the multitude of new entrants and technologies entering the healthcare market that can offer new innovative approaches but may have unproven results. Lynch encourages new partnership models to test and assess the strength of a new product or company. "The ability to go at no risk and pilot a solution is very beneficial, especially when evaluating a company that does not have a strong track record," explains Lynch. To ensure mutual success and accountability, Lynch requests commitments or guarantees of performance to determine if the desired objectives of the partnership are being met. This is a requirement for all partners regardless of track record and size.

As companies and technologies rapidly evolve, understanding and keeping pace with a partner's capabilities is another area that Lynch stresses for the mutual success of any partnership. Lynch explains, "We cannot waste any dollar spent on technology and need to maximize technological capabilities to its fullest. For example, we can't be left using our smart phone like a flip phone, especially when we paid the price of a smart phone." As a result, Lynch has created a culture of transparency and accountability amongst his team and partners. He holds each party equally accountable for success and encourages regular reviews with KPI milestone check-ins. This builds collaboration for the joint success of partners and ensures the evolving benefits of any technology are realized and maximized across MLH.

Overall, PE 2020 is the compass the drives MLH's decisions and actions surrounding transformation. This ensures that all employee behavior, decisions and investments are orchestrated to create a high-reliability and high-performance organization focused on quality, safety, equitable care delivery and financial responsibility.

About



Imalogix is deep learning AI for radiology that enables systematic improvement of workflow, quality and safety. The cloud-based machine-intelligence of the Imalogix Platform proactively uncovers where and how to reduce unwarranted variability. Decision-making moves to proactive and predictive to lower risk, drive growth and evolve the standard of care. **For more information, visit imalogix.com.**