



# Using Clearsense 20/20 to Predict Renal Failure

# **GET TO KNOW OUR CLIENT**

Headquartered in Nashville, Tennessee, a predominantly Black college, Meharry Medical College, sought to better rates of health equity through exploring renal failure in underserved populations.

#### FACING HEALTH DISPARITIES HEAD-ON

- Black Americans face a propensity of renal failure 5.5x
  that of the standard population
- Identified population representing 14% of total population covering 87% of all renal failures.
- 50% of the subgroup could be positively identified with only two tests

#### THEIR CHALLENGE

Partnering with Clearsense, Meharry College had two main areas of focus. The first was a better understanding of the disparities surrounding Black Americans—more at risk for renal failure by using data patterns and knowledge. The second was to develop new testing and mitigation efforts to expand resources to the selected population.



#### **OUR SOLUTION**

Analyzing datasets with IrisPro, the team developed a full plan to meet each goal. Leveraging the 20/20 platform, key drivers were recognized, and the Clearsense team worked in partnership to build various models based on defined objectives—including coverage and precision. Further identifying drivers and unique subgroups, Clearsense elevated the datasets with auto-segmentation allowing certain behaviors to come to the forefront—better telling a story of risk and need.

Providing insights in real-time to clinicians on the likelihood and reasons for renal failure, Clearsense not only equipped the data to identify populations most at risk but helped develop key indicators to look for in datasets in a future-forward approach. Most importantly, Clearsense was able to identify the best lab test for Chronic Kidney Disease prediction without misclassification.

"Clearsense 20/20 gave our client proper computation resources and better hyperparameter tuning of XGBoost, allowing us to build a better model — one that elevated both research and patient outcomes."

Charles Boicey, MS, RN-BC | Clearsense Co-founder & Chief Innovation Officer



# **GET TO KNOW US**

Committed to leading transformation in healthcare, Clearsense® creates a data journey, all the way from number to key insight. Cloud-based, Al-enabled, and HITRUST-certified, the platform of data solutions ensure data governance, implementation, and analytics are rapidly mainstreamed while remaining scalable and secure. Driving faster outcomes in clinical, financial, and operational environments, Clearsense is powering the innovation of tomorrow—right now. Learn more at Clearsense.com.

# THE CLEARSENSE PROMISE

# **OUR MISSION**

Our mission is to unlock the full potential of healthcare data by delivering flexible solutions that empower data confidence and enable data-driven decision-making to achieve better outcomes.

# **OUR VISION**

We have created a holistic data environment with processes to cleanse, normalize, harmonize, and integrate better data with tools to make it more manageable, accessible, and valuable. We are unlocking the potential of data from patient care decisions, business operations, financial routines, and research.

# Are You Ready to See Your Data More Clearly?



Clearsense.com



904.364.5629

# WHY CHOOSE CLEARSENSE?



# One Platform, One Partner

One partner with an advanced end-to-end platform that empowers executives, business owners, clinicians, IT, and data scientists.



# **Data First Approach**

Eliminates assumptions and replaces them with a single source of trusted data. Put trusted data into action without barriers or fear.



# **Healthcare Focused**

We are 100% focused on the healthcare industry, which means we understand your data challenges and opportunities.



# Security

Multi-cloud, HITRUST certified, HIPAA and SOC 2 compliant with SSO Integration. Role-based security controls at the application and data levels. We treat security with the highest level of importance.



# **Data Quality & Trustworthiness**

Data governance advisory services wrapped around AI technologies and processes ensure the highest level of data trustworthiness.

Your Data. Protected.













