



## The Utility of LongevityQuest® for Physicians

Using Advanced Data Analytics for  
Insight and Patient Engagement

*I am always looking for the best tools to help me diagnose and treat my patients. The **myLQAnalysis** tool helps put a patient's overall longevity wellness in perspective while providing me with actionable information on potential conditions that traditional diagnostics may not have identified. As a physician, I can use this **Analysis** to aid me in assessing my patient's overall wellness picture and improving outcomes while increasing their engagement in their health.*

**R. Michael Murray, MD • Physician and Medical Director**

## Vision

The unique **myLQAnalysis**® report was created to help consumers better understand their wellness, identify Potential Conditions and their Contributing Factors, and become more actively engaged in managing their health. LongevityQuest believes that a long, good life is far more likely when consumers have continuing dialogue with you, their personal physician. Their goal is to encourage that connection and provide important information—**even that which may not be readily apparent through traditional testing**—so you can best manage and contribute to their progress.

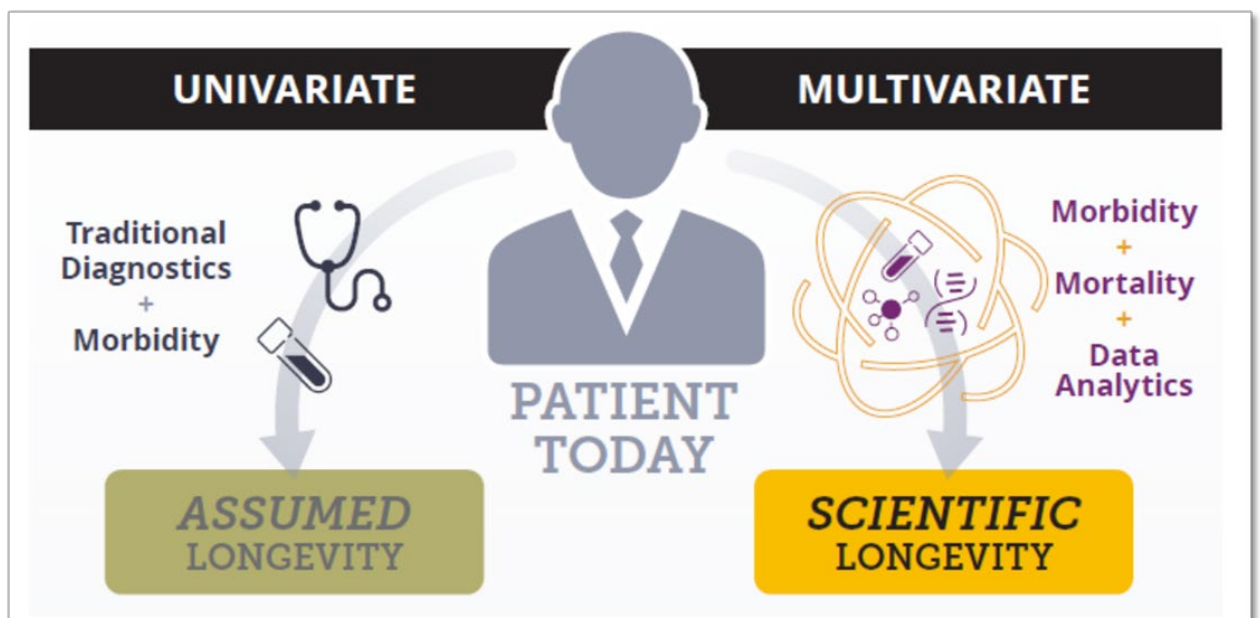
LongevityQuest synthesizes actuarial skills and risk assessment technology used behind the scenes in the insurance industry to provide insight into biomedical wellness. Although diagnostic interpretation is left to you, their physician, LongevityQuest has access to remarkably deep data as to Potential Conditions and their Contributing Factors that are likely to impact their longevity wellness.

## The Science

By harnessing the power of advanced data analytics, over 50 million individual cases (including prescription histories, diagnostic testing records and diagnosis codes) were analyzed by a team of biostatisticians from the nation's largest diagnostic testing company – Quest Diagnostics - and a leading technology and research university - MIT.

That analysis led to the creation of a complex series of algorithmic models that assess hundreds of variables and their inter-related aspects in numerous body systems.

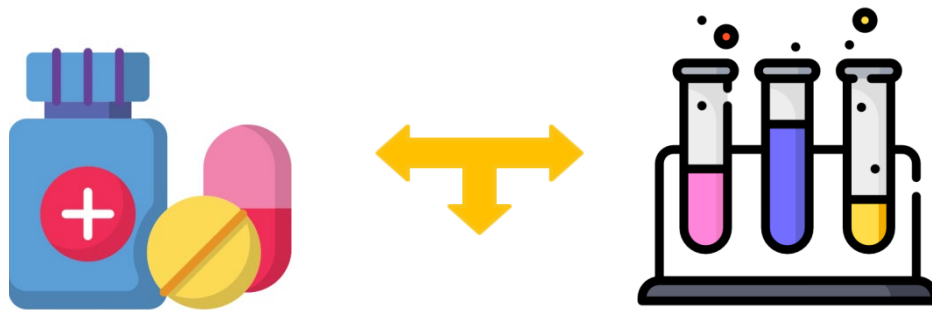
Said another way, rather than consider each lab and physical measurement factor alone (univariate), this system considers their interconnections (multivariate), actually evaluating each single variable in the context of the hundreds of other variables when assessing impacts.



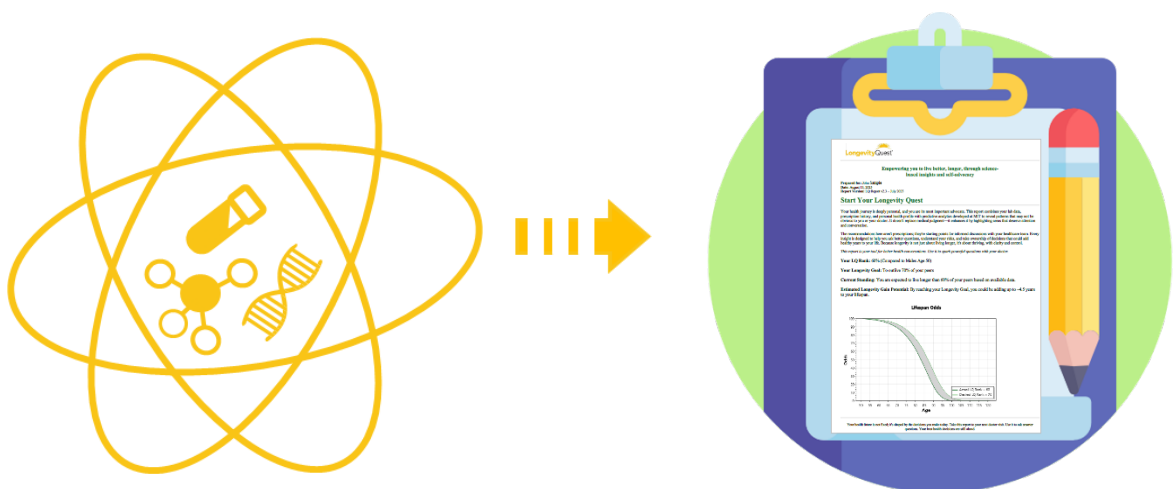
## The Process

Customers simply complete a brief order form to confirm their personal information and sign a HIPPA authorization. That's all it takes on their part and can be done anywhere from a connected device.

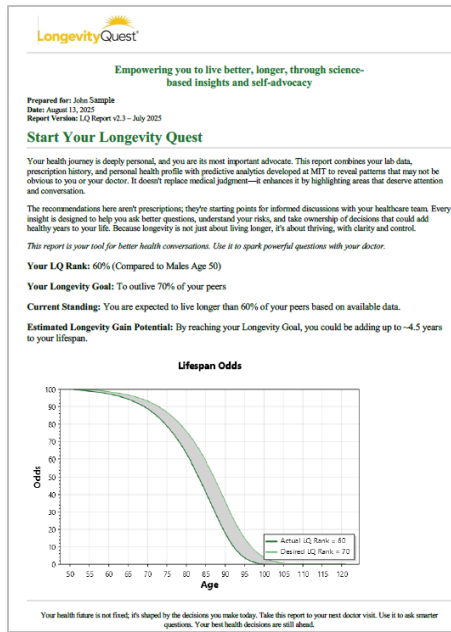
Once that information is entered into LongevityQuest's secure system, extensive routines are used to search databases that contain the vast majority all the electronic prescription drug records as well as the diagnostic testing records and diagnosis codes of the two largest laboratories in the country.



Data from these searches is then put through the advanced multivariate review in a series of sophisticated algorithms to be mapped against millions of actual test cases. LongevityQuest then uses various mathematical and actuarial techniques to calculate the patented **myLQRank®**. The system then displays the confidential and custom *Analysis* report for review, download or printing.



## The Report



The *Analysis* report prominently features **myLQRank** – a patented percentile ranking of the customer’s calculated longevity against others their age and gender by comparing them to the “Scientific Best” and “Bottom 1%” per LongevityQuest’s sophisticated models, and the “Population Median” based upon research conducted by the Centers for Disease Control and Prevention (CDC) as published in the National Vital Statistics Reports. This rank helps put the customer’s overall wellness into perspective.

Additionally, the *Analysis* asks where you think you will rank and where you want to rank. Once the actual rank is determined, they know their “rank gap” and can use this as a way to measure progress toward wellness goals.

The *Analysis* also contains a chart of **Potential Conditions**, their probability and their Contributing Factors. *This list even includes ones that may not have been diagnosed yet* – what is called “**cryptic risk**”. Over 200 Potential Conditions from virtually all ICD-10 categories can be identified, and Contributing Factors are shown using common medical terminology, making it easier to use with other diagnostic information for proper evaluation and diagnosis.

Potential Conditions			
This section is powered by predictive models developed in partnership with MIT and used across healthcare, insurance, and wellness industries. It flags potential health risks based on your current data, but does not replace medical evaluation.			
Potential Condition	Scientific Confidence	Longevity Impact	Contributing Factors
Circulatory Disease - Any	55.8%	High	Chloride, Alb/Glob Ratio, Potassium, Calcium
Any Endocrine Disease	97.8%	Moderate	U. SG, I10-Hypertension, A1c, THC
Elevated blood glucose level	54.4%	Moderate	U. SG, Hep B Ag [Presence], U. Casts, S. Gluc
Other disorders of brain	53.3%	Moderate	R53-Malaise, Cefazolin [SUS], RDW, Thyrotropin
Any Muscle Disease	80.2%	Low	Sodium, Hydromorphone, Free T4, Urate

## What to do with *myLQAnalysis* Report

The *Analysis* report provides healthcare professionals incredible insights to aid in diagnosis and monitoring. It makes no attempt to diagnose, but can assist by even suggesting questions for discussion, unique to each individual and based upon the Potential Conditions identified, using advanced AI techniques.

### Ask Your Doctor About

This section highlights potential conditions identified by advanced analytics models based on your lab and prescription history. These are not diagnoses, but discussion prompts for further investigation, especially if symptoms are present or key lab tests have not been performed recently.

*Note: Some critical lab markers commonly used in life-insurance and longevity analysis (e.g., NT-proBNP, insulin, GGT) may be missing from your records. This can affect the completeness and accuracy of condition detection.*

- High blood glucose: Discuss recent lab results and watch for increased thirst or frequent urination.
- Brain function: Explore causes of recent confusion or persistent headaches.
- Muscle health: Consider muscle weakness or cramps and possible links to lab findings.
- Circulatory health: Blood pressure management and monitoring for swelling or chest discomfort.
- Endocrine concerns: Blood sugar control and awareness of fatigue or unexplained weight changes.

Statistically, most of our patients should generally be in normal ranges, and their interaction with their physician will simply be a heightened willingness to keep an eye on their health. However, some will have *Analysis* results that are concerning, and they will want to engage their physician to dig deeper to find what may be underlying the contributing factors in the *Analysis*. The patented ranking system provides a baseline for tracking improvement over time as conditions are diagnosed, and treatment plans are implemented.

The physician is to use best judgment in determining what additional tests or analysis would be helpful.

### About LongevityQuest®

LongevityQuest encourages and empowers people to pursue a long, good life. Our innovative *myLQAnalysis*® reports provide individuals with a patented ranking against others and comprehensive analysis of risk factors that may be subtracting from or adding to your longevity – all from the convenience and confidentiality of home. For more information, visit our website at [mylongevityquest.com](http://mylongevityquest.com) or contact us at [info@mylongevityquest.com](mailto:info@mylongevityquest.com)

The information provided is intended for general use, and is not designed to diagnose, prevent, treat or cure any condition or disease. Longevity Quest uses biomedical data and prescription/diagnostic test records to analyze and calculate expected longevity and related information. While such information might point to a potential medical issue, all such diagnoses should always be performed by a qualified health care provider. The information provided is for demonstration purposes only, and in no way does such information constitute a warranty, representation, recommendation, or validation regarding your physical health or wellbeing.