

## CASE STUDY

# Enabling Population Health Research

A large non-profit healthcare system



The study enrolled 7,500 individuals that were proactively screened for pathogenic variants in the genes linked to familial hypercholesterolemia (FH). The goal of the research is to develop and test FH classifiers that can identify a clinical phenotype for FH.

## The Problem

Cardiovascular outcomes for people with familial hypercholesterolemia can be improved with diagnosis and medical management. However, more than 90% of individuals with familial hypercholesterolemia (FH) remain undiagnosed in the United States. A non-profit health care system headquartered in the south, leveraged the LifeOmic Platform to accelerate early diagnosis and timely intervention for the more than 1 million undiagnosed individuals in the United States. This study enrolled 7500 individuals that were proactively screened for pathogenic variants in the genes linked to FH.

## The Study

LifeOmic provided the platform that enabled clinical and genetic data aggregation, eConsent and survey collection and research tools for the population health initiative. During the study, the study participants visited a clinic to provide a saliva sample for Helix genetic testing and, using the LifeOmic Platform, completed a digital intake form and an eConsent on a computer.

- Helix sequencing data files were uploaded to the LifeOmic Platform for ingestion and the files were automatically matched to the existing associated patient information from intake forms.
- The institution's research team reviewed the data and using the platform's Jupyter notebook capability, as well as third party tools, conducted analysis on whether or not the genetic variant for FH was present.
- The health care system's research team also created and sent surveys to participants at the one month and six month checkpoint that could be completed from home or at the clinic.





# Supporting Population Health at Scale

The **LifeOmic Platform** delivers the comprehensive tools to deliver on the promise of population health and research at scale with fewer administrator touchpoints while simultaneously providing comprehensive and personalized support for the participants.



## Securely Collect & Store Data

HIPAA compliant, HITRUST CSF Certified, GDPR compliant and securely collects data and converts to FHIR standards.



## Run Real-Time Data Analysis

Conduct in-depth research with a secure, integrated environment for running Jupyter Notebooks



## Incorporate EMR, Wearables & More

Incorporates the full spectrum of personal health data including EMR, wearables, biometric, surveys, genomic sequencing and biomarkers.



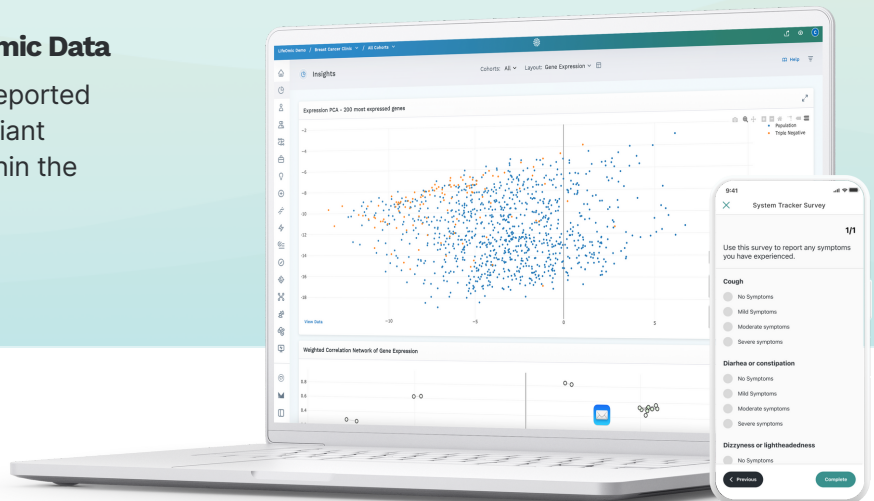
## Leverage Configurable Mobile App

Deliver custom educational content and digital treatment binders, collect e-consent, surveys and patient reported outcomes and integrate wearables.



## Harmonize and Annotate Genomic Data

Deeply explore reported and unreported variants with public database variant annotations, such as ClinVar, within the LifeOmic platform.



Today, millions of people around the world are using LifeOmic's solutions to benefit from the coming age of precision health."

Dr. Don Brown, LifeOmic Founder