

[TECHNOSSUS]

NEW SYSTEM LINKS PHYSICIANS, PATIENTS, & LABORATORY

Vantari Genetics is a clinical laboratory on the forefront of the personalized medicine field, providing a wide range of testing services — from anticipating drug interactions to analyzing risks for inherited diseases and cancer — that enable physicians to take a proactive approach to medical care.



The Challenge


Vantari was rapidly expanding the volume of tests processed in their laboratories, as well as the number of testing services they provided. The manual testing processes were inhibiting their growth, so Vantari turned to Technossus for help with their overall IT road map.

Their most urgent need was for a laboratory information management system (LIMS), which would manage the workflow and automate data capture, but Vantari was grappling with other issues which were also hampering their growth.

One of Vantari's most pressing challenges was that the entire field of genetic testing was evolving so rapidly that physicians were often unaware of which tests were currently available. Even if they were aware of a test, a physician's office generally needed to research whether or not the test qualified for reimbursement from a patient's health insurance before they ordered the test. Viewed holistically, the entire genetic testing process extended beyond the Vantari laboratory, encompassing the physician's office, the patient, the healthcare insurance provider, and even the specimen delivery service, in addition to the laboratory.

Moreover, the entire process — from gathering a patient's genetic history and determining the appropriate tests to obtaining a sample, sending it to the lab, and getting lab results back to the physician — was burdened with manual steps and manual data entry, and every manual process increased the risk of error.

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The Technossus Solution



This innovative solution, which also created a more seamless flow of information between the patient and physician, included:

- A patient portal, which could be accessed via a tablet, and guided the patient through a series of questions designed to illuminate their genetic background. The patient portal analyzed the results of the patient questionnaire, determined which genetic tests would be pertinent to their medical condition, checked the patient's health insurance guidelines to see if the test would be reimbursed, and funneled the appropriate test recommendations into the physician's portal.
- A physician portal that presented test recommendations for each patient to the physician for review. If the physician approved the tests, the order, along with the patient's genetic history, could be transmitted directly to the Vantari laboratory with a single mouse click.
- A LIMS that managed the entire laboratory workflow beginning with the initial order in the physician's office to the final report, and included tracking the shipment and receipt of patient specimens; capturing, integrating, and analyzing all of the data from each laboratory test for each sample; and making the report available to physicians via the physician portal.

The Result

The new LIMS allowed Vantari to rapidly increase the volume of tests they could perform. More importantly, it eliminated the possibility of errors throughout the entire process — from gathering the initial patient data to delivering the final report — by eliminating numerous manual steps.

Vantari's clients, the physicians who ordered the tests, also benefited from the system, as it made it far easier to determine the appropriate genetic tests for their clients. It also eliminated the time-consuming paperwork involved in ordering the tests.

The new system also provided a vehicle for keeping physicians apprised of what tests were available from Vantari, which made it easier for Vantari to grow their business with their physician network as their testing capabilities expanded.

\$5.1B

Global genetic testing market size

12%

CAGR of genomics-based
diagnostica

22B

Estimated global genomics
market by 2020