## LabVantage LIMS for Public Health

Access and analyze public health data in a next-generation informatics solution

### Accommodate workflows in all public health labs



Microbiology



Clinical Chemistry



Infectious Disease





Special Pathogens



Forensic Toxicology



Radiochemistry



Newborn Screening

LabVantage LIMS for Public Health precisely accommodates all workflows in all laboratories across all departments and divisions of federal and local public health organizations.

## Public health labs – data follows the sample

Sample Accessioning and Test Assignment

Receive samples, initiate chain-of-custody, assign to lab

Receive samples, initiate chain-of-custody, assign to laboratorians and instruments using Performance Asset Optimization, order tests and kits via secure online portal. The portal is 100% ETOR compliant.

Laboratory Analysis

Access lab operational status and worksheets via dashboards, select and enforce SOPs for

sample cycle automation via Laboratory Execution System (LES), digitally track compliance and assure quality using Electronic Laboratory Notebook (ELN).

Results Analysis and Validation

Receive alerts for preset and Al-derived out-of-spec results, detect trends and ensure accurate and defensible results using advanced analytics and SQC charts and reports.

Reporting and Integration with EHR Systems

Automatic as-directed delivery of configurable reports; integration with labs (federal, state, local, clinical and physician labs, environmental organizations); self-service access to reports via secure online portal; integration with LRN-C, LRN-B, and LRN-R for threat analysis.

**Administration and IT Functions** 

Interoperability with CDC-required formats, HL7, CDC Data Modernization Initiative; highest security provisions in the public health market; laboratory performance monitoring with drill-down to sample; AI/ML analytics for streamlined personnel and instrument availability; embedded corrective action reporting.

The LabVantage LIMS platform for public health laboratories delivers productivity, security, quality, and regulatory compliance in a single solution. A next-generation LIMS with embedded ELN, LES, SDMS, and available predictive and prescriptive analytics capabilities, LabVantage transforms data into insights that support the mission of public health labs.





# A Next-Generation LIMS



## **Introducing LabVantage LIMS for Public Health**

#### Reimagining LIMS for the Public Health Mission

The important work of public health laboratories – whether federal, state, or local – protects people, agriculture, and the environment in the face of disease, pollutants, contaminants, and more. Detecting and monitoring threats requires data defensibility and data mining beyond the lab.

LabVantage Solutions, the leading provider of laboratory informatics solutions and services, offers its next-generation LIMS for public health laboratories to seamlessly manage the vast amount of data produced in these labs, providing data defensibility and validation.

A proud Platinum member of the Association of Public Health Laboratories, LabVantage deploys its public health solution in adherence with HIPAA, CLIA, CAP, and ISO-17025 requirements, as well as evolving requirements from the Centers for Disease Control's Data Modernization Initiative.

The platform features instrument and business system interfaces and configurations to accommodate laboratory, clinical, newborn screening, and reference/forensic testing.

#### KEY BENEFITS OF LABVANTAGE LIMS FOR PUBLIC HEALTH

- Advanced technology 100% browser-based HTML5, advanced predictive analytics via artificial intelligence/machine learning, delivered with 1000+ Al algorithms and 500+ visualization options.
- Chain of custody Person-to-person and person-to-secure-location transfers, with configurable report and automatic sample/method history.
- Dashboards View all key performance indicators in real time for all lab operations and samples.
- Data mining and visualization Intelligence software to query all data and update configured interactive dashboards and reports.
- Deployment options Cloud, SaaS, or on-premises with industry best practices, including data integrity and cybersecurity protections.
- Single, seamlessly integrated platform LIMS for sample/data management, ELN for tracking analytical life cycle, SDMS to collect and secure files with full traceability and searchability, LES to enforce workflow SOPs.

- Instrument integration Interface with most networkable instruments; store raw data in the embedded Scientific Document Management System (SDMS).
- Workflow Drag-and-drop graphical workflow designer to precisely enforce your desired workflow for all samples/tests/methods/SOPs.
- Inventory/Reagents Track and manage equipment, chemicals, reagents, standards, and lab consumables with low-stock alerts and ordering.
- **Corrective action** Generate Root Cause and CAPA reports.
- Ad hoc queries Configurable user searches to query any field in the LIMS. Analytics beyond the scope of all other vendors.
- Asset optimization Plan future work around personnel scheduling, instrument availability, sample load, and holidays.
- Quality assurance Disallow non-certified, non-QC-compliant instruments, materials, and personnel. Prevent all forms of dry-labbing.

