COVID–19
+stay informed

Optum COVID-19 Data Quality Services
Improve the accuracy of COVID-19 data to help reopen communities

Timely, reliable data is critical to tracking, managing and containing the spread of COVID-19.

However, labor-intensive data intake collection processes, delays in reporting and inconsistent data quality compromise the integrity of the analysis needed to help public health officials take appropriate decisive action to prevent the transmission of the disease, respond to new outbreaks, and rapidly distribute the vaccine to reopen communities.

High volume and inconsistent data quality:	Results in:
• Incomplete fields (demographic data, race, etc.)	• Delays in identifying positive COVID-19 cases
• Duplicate reports from lab and case data	• Challenges to correctly identify populations to be vaccinated and track progress
• Incorrect/incomplete information for accurate patient matching (name, address, DOB, gender)	• Lack of clean data for second dose follow-up and tracking
• Inability to automatically reconcile multiple lab reports for the same individual into a single case	• A labor-intensive processes to derive accurate case counts
• Submitter variations in service and patient data	• Intake delays and re-work
• Inability to add data from multiple vaccine sources, providers, or events	• Increased effort and risk to address data quality issues on the back end
• Inability to support data elements the current system may not support real time	• Compromised quality of COVID-19 analysis used for emergency public health decision-making
• Inability for various stakeholders — state users, county users, public health agencies, Medicaid, and others — to use the data for their respective needs	

optum.com/covid-19

Stop fixing data on the back end; improve the quality at the beginning

Optum provides an automated solution to help improve the data quality, management and efficiency at the front end, accelerating the speed and accuracy of COVID-19 daily case counting and reporting. Optum COVID-19 Data Quality Services effectively manages and improves the quality of large volumes of lab, vaccination and public health department data for reporting and analysis. Our solution accommodates data from existing data sources and will support new and evolving data sources that emerge as the state makes progress on vaccinations. Our data management is what sets Optum apart.

Improving the quality of large volumes of clinical/lab/vaccination data (follows HL7/CDA/FHIR standards)

Secure data intake

- Flexibility to meet submitter where they are with secure transfer of data options
- Automated intake with multiple connection options
- Industrial scale to meet current and future growth
- Real-time submitter feedback of invalid file format
- Authenticated identity of authorized labs and providers

Enhance data quality, completeness, standardization, normalization

- Automate error detection and correction, making data usable for critical reporting
- Transform (LCD to LOINC)
- Correct data in wrong locations
- Identify codes related to COVID-19 for separate handling
- Audit track all changes to data
- Automated normalization based on a vast library across local text, codes and values
- Enrichment, including national reference ranges; normalized interpretation and classification of lab results and CDC vaccine data

Automate patient matching and dedupe

- De-duplication logic provides ability to remove duplicate test for accurate counts and lists
- Member matching is critical to patient, case counts and communications for vaccinations
- Automation of member matching is key to scale with manual intervention when needed
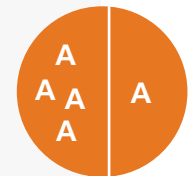
Fix data at its source

- Inbound data tracking and lab submitter engagement to resolve issues to improve the data at the source
- Improve connections to optimize the process flow of data
- Resolve any other data issues they may have

Optum COVID-19 Data Quality Services is a comprehensive automated solution with several key features

Intake and improve

Store

Analyze

Publish

Our end-to-end solution goes beyond robust and automated data management to also store, analyze and publish COVID-19 reporting data to key stakeholders. Features include:

- **Rapid build of interfaces and connectivity,** data intake, normalizing, routing, advanced enrichment of data from hundreds of labs and providers in dozens of formats, transformed into a standard format.

- **Cloud data warehouse supporting public health** for data preparation and storage of all data. Management includes the training, support and monitoring to assist agencies in the access and use of the data.

- **Case performance reporting, monitoring and evaluation.** Our intuitive web dashboard helps agencies monitor the data integrity of case, lab and vaccination processing data, and frequency of data transmissions to other jurisdictions, data scientists and key stakeholders.

- **Normalized data extraction** to counties, cities, public health agencies, government personnel, data scientists and others working to understand and contain the spread of COVID-19.

- **Training and organization change management** in partnership with the agency to help staff transition to the new system and become familiar with available tools.

- **System maintenance and operation services** are available as well, including end-user support and help desk.

- **Electronic case reporting (eCR)** to the state and other stakeholders to make disease reporting faster and easier for review and action.

Optum COVID-19 Data Quality Services allows state teams to be confident in the data behind the reports:

Increase the state's ability to process COVID-19 reports.

Conduct thorough quality review of all data prior to being sent to downstream stakeholders.

Achieve accurate analysis of populations and vaccination coverage information.

Enhance overall data quality at the source.

Access real-time dashboards to monitor data processes supported by a robust consolidated data warehouse.

Optum is an analytics-driven health care services company, bringing extensive resources at a scale and scope that supports the entire health system:

36

states use Optum solutions driven by our analytics

Optum analytics are used in

700+ and **7,000+**

facilities   medical clinics

~25,000

data scientists, clinicians, health economists, technologists and other skilled professionals working collaboratively among our 189,000 employees

- Optum maintains a database covering nearly 250 million de-identified lives, spanning clinical, claims and employer benefits, which is used to foster innovation and research across health care.

- Providers used Optum analytics solutions to process more than 93 million lives of clinical data in the United States in 2019.

- Optum has 120 patents covering rules-based models and artificial intelligence systems designed for health care.

- Optum Analytics products have processed and analyzed over 245 million lives of claims data in the U.S. as of Q2 2020.

- Secure and reliable data centers house 161+ petabytes of primary storage capacity with over 105,000 servers and 427 mainframes.

2019/2020 Everest Group PEAK Matrix Awards — Optum leads in health care analytics and digital services

Everest Group's PEAK Matrix® offers an objective, data-driven and comparative assessment of service providers based on their market impact, vision and capability. Service providers are classified as Leaders, Major Contenders and Aspirants.*

Everest Group® PEAK MATRIX™ LEADER 2019
HEALTHCARE PROVIDER DIGITAL SERVICES

Everest Group® PEAK MATRIX™ LEADER 2020
HEALTHCARE PAYER DIGITAL SERVICES

Everest Group® PEAK MATRIX™ LEADER 2019
HEALTHCARE ANALYTICS SERVICES

Optum was recognized as a Leader for its exemplary value delivered, technology investments and delivery capability. Among 19 competitors, Optum was the only health services company to achieve this distinction.

Optum was recognized as a Leader for its distinctive healthcare expertise, top score in client value delivered and strong market impact in healthcare digital technology thought leadership. Among 23 competitors, Optum was the only health services company to achieve this distinction.

In its debut as a category, Optum emerged as a Leader among 18 competitors for its extensive investments and unique demonstration of both clinical and administrative capabilities across the entire payer and provider value chain.

*For more information on Everest Group and PEAK Matrix assessments, visit everestgrp.com.

To learn more about how Optum can help your state and local communities address the COVID-19 pandemic, contact us.

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