

Managing COVID-19 Health System Impact Using Lumiata AI Predictive analytics for population and patient health management

Leveraging its pioneering leadership in AI, strategic partnership with BlueCross BlueShield, and data asset of 100 million patients, Lumiata is uniquely positioned to deliver predictive analytics to help manage COVID-19's impact on the US health system.

Lumiata Solution for Patient and Population Health Management

The Lumiata AI Platform prepares raw data from sources that include patient medical records, insurance claims, medical billing codes (e.g., ICD-9, ICD-10, CPT), lab results (LONIC), medications and even unstructured data like doctor's notes. Lumiata AI Platform automates the ingestion, cleansing, and organization of disparate data sources into a consumable data format ready for machine learning (ML). Lumiata's platform includes a toolset for healthcare data scientists to quickly access, as well as, create and maintain machine learning models.

Lumiata Model Library includes more than 100 healthcare-specific AI models. These predictive models provide insights into clinical, operational and financial use cases for improved health risk awareness and cost management.

Lumiata AI Can Help Address the COVID-19 Pandemic

Lumiata can move quickly and adapt to a breadth of predictive use cases to help manage the impact of COVID-19 pandemic on the nation's health system. We can immediately begin to address the following use cases using existing models for predictions. As more data becomes available, we will explore additional solutions.

For Health Systems

- Forecast recurrence or resurgence of COVID-19 using epidemiological models
- Predict hospitalization, ICU admissions, and re-admissions
- Calculate COVID-19 incidence by region, hospital system, and community
- Inform physicians of patients' medical records, including comorbidities, prior hospitalizations, outpatient encounters, labs, imaging, and medications to help enhance clinical decisions

For Federal, State and Regional Health Agencies

- Predict the spread of disease within a specific community
- Calculate healthcare resource needs and associated cost (e.g., anticipate and plan for the cost of testing and treatments)

Lumiata AI Models Outperformed Legacy Methods by 5-20% in Predictive Precision For National Health Plan

Lumiata's Cost Prediction Models significantly outperformed the Health and Human Services (HHS) hierarchical condition category (HCC) risk adjustment model using claims records of over 20 million patients.

"We've 'templated' our model building capabilities," said Rohun Kshirsagar, Lumiata's senior director of data science. "Our customers can quickly build an end-to-end pipeline using our models as a starting point. The platform accelerates the power to deploy into production. The platform means that customers don't have to worry about the infrastructure and engineering required to operationalize AI models."

At Lumiata, we deliver solutions to meet the needs of public and private health care for today and tomorrow. Based in the heart of Silicon Valley, Lumiata is an Artificial Intelligence company purpose-built for the healthcare industry to manage costs and risks. Our predictive power is generated from more than 100 million patient records, in-depth clinical knowledge, and IP using Lumiata proprietary disease codes. We have over 100 pre-trained, machine learned models that address a breadth of use cases. Our toolset for data scientists is customizable to help them build, deploy, and maintain models within their organization. We help payers and providers, wherever they are in their AI journey, address their most critical business needs. The company is backed by BlueCross Blue Shield Venture Partners, Khosla Ventures, and Intel Capital.