

Data and Analytics Helps Deliver Safe Care During the Pandemic



Within three weeks, developed multiple analytics solutions to meet varied organizational needs.



Integrated data and analytics, and COVID-19 specific metrics for more than 200 patients with COVID-19.



Hundreds of hours of manual data collection avoided.

PRODUCTS

- Health Catalyst® Data Operating System (DOS™)
- Self-Service Analytics Suite

THE CHALLENGE

Renown Health was prepared to safely provide care to patients with COVID-19. As the pandemic emerged, the organization used data in its EMR to monitor COVID-19 activity, but quickly identified that it needed more robust disease surveillance and reporting. Renown Health needed to integrate and visualize more than EMR data—it needed the ability to visualize and identify trends over time to inform and drive the organizational response plans.

THE PROJECT

Renown Health leveraged the Health Catalyst® Data Operating System (DOS™) platform and Self-Service Analytics Suite to meet multiple organizational needs.

Renown Health developed a COVID-19 executive dashboard, visualizing numerous COVID-19 summary metrics, including admission, discharge, and transfer (ADT) activity of patients with COVID-19, average daily census, and the utilization and availability of critical resources.

The organization integrated data from quality reviews into DOS, creating a COVID-19 quality outcomes dashboard. Renown Health can easily visualize the case review results, and can monitor trends and detailed information for the source of COVID-19 exposure, patients' risk-factors, symptoms displayed upon arrival, complications, and the level of respiratory support required.

Renown Health automated the daily report submitted to the Nevada Hospital Association. Using DOS, the organization can report 24 different measures. It can easily provide data about COVID-19 testing and ADT activity, staffing/bed availability, ventilator supply, respiratory support required by patients, PPE availability, illness among ICU physicians and nurses, COVID-19 onset after hospital admission, and COVID-19 mortality.

THE RESULT

By leveraging DOS, Renown Health expanded its COVID-19 data beyond the data in the EMR. It has the integrated data and analytics required to plan and manage a comprehensive COVID-19 response effectively. Renown Health can identify and respond to changes in patient volumes and can rapidly identify and communicate when patient needs and capacity are changing, requiring different resources. Using DOS, the organization can evaluate the quality of care provided to its patients, in addition to the effectiveness of its incident response.