Cloudticity Healthcare DataHub
Healthcare innovation at the speed of Cloud

cloudticity

Why product (benefits)?

- **Compliance** – 1000+ continuous compliance checks mapped to HITRUST CSF controls and HIPAA CFRs

- **Security** – Incident management, Machine l:arning-based (ML-based) anomaly detection, and monitoring mapped to OWASP and CIS

- **Agility** – 70% of help desk tickets are resolved within 1 hour

- **Reliability** – Automated remediation of 99% of operational issues coupled with always-on, real-time help desk

- **Performance** – Real-time monitoring of 1000+ AWS CloudWatch data points

- **Cost** – Customers save an average of 30% on cloud spend in the first three months

aws partner network

MSP Partner

Healthcare Competency

Advanced Consulting Partner

DevOps Competency

Public Sector Partner

Solution Provider

HIPAA COMPLIANT

HITRUST CSF Certified

Product overview

Cloudticity Healthcare DataHub is a next-generation data platform purpose-built to quickly and efficiently transform large scales of healthcare data into actionable insights via 100% cloud-native services and groundbreaking automation. It allows healthcare providers to ingest, normalize, analyze, and report on patient data from a wide variety of sources in a fraction of the time—and at a fraction of the cost—of traditional healthcare data solutions.

With Cloudticity Healthcare DataHub, there's no physical infrastructure or tedious data transformation required. The solution automatically parses the data, allowing you to view all your data in a common language on a single dashboard. Combine real-time and historical data analysis to predict trends, improve care, and drive long-term growth.

Product features

NEXT-GEN SPEED TO VALUE: Deploy and scale in 15 minutes. Provides out-of-the-box data transformation into single, workable format.

NEXT-GEN SPEED TO VISUALIZATION: Work with the data using SQL syntax, or more advanced tools like Spark and R. Train and leverage machine learning models, BI, and NLP that is aware of medical terminology.

NEXT-GEN INTEROPERABILITY: Integrate data in any format, including HL7v2, FHIR, CCDA, JSON, CSV, unstructured data, and custom file formats.

NEXT-GEN FLEXIBILITY: Flexible, schema-on-query model that is adaptable to data model changes over time.
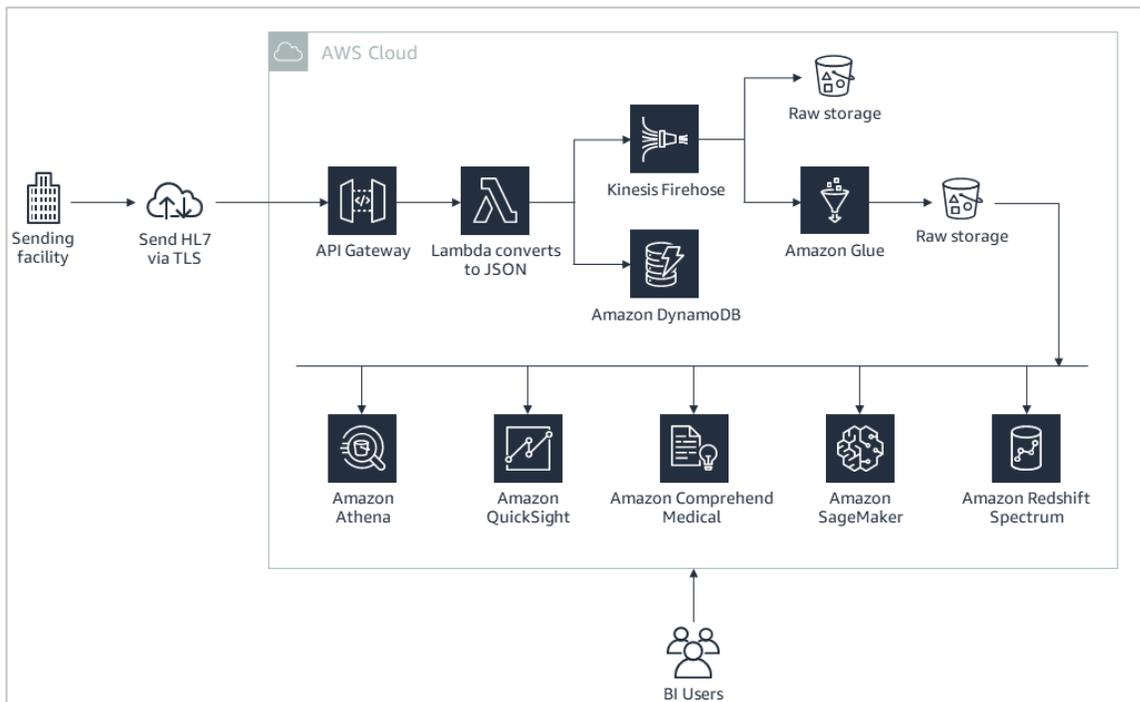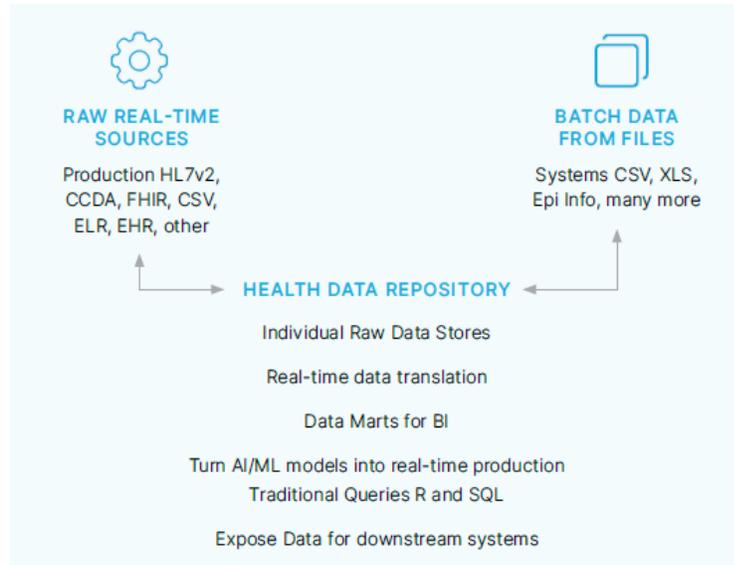
NEXT-GEN COST EFFICIENCY: Affordable, cloud-based storage and solutions.

How it works

Just deploy the cloud-native ingestion engine and let the solution do the heavy lifting. It automatically parses the messages into JSON and then converts JSON into Parquet and streams large datasets to the cloud-native data store at scale. Then it performs ETL operations on the Parquet data.

Case Study

New York State Goes From in the Red to in the Green

Challenge

In March 2020 at the beginning of the pandemic, New York was one of the first and hardest hit states. With the virus rapidly spreading, a state department of health reached out to AWS and Cloudticity in need of a solution that could ingest massive quantities of healthcare data, normalize and consolidate the data, and provide real-time insights to drive the COVID-19 response activities.

Solution

Cloudticity and AWS deployed Cloudticity Healthcare DataHub. They organized requirements across multiple HIEs and over 100 stakeholders. They trained the health department's analysts and had the team working with production data in 11 days. You can learn more about this project in this news article.

Outcomes

- Began visualizing real-time COVID-19 clinical data in just 11 days
- Able to process data within 5 minutes of delivery, resulting in more relevant reports on risk factors, comorbidities, and infections
- Able to intelligently manage ventilator inventory, hospital capacity, and ICU beds needed using machine learning algorithms
- Able to perform contact tracing by pushing positive tests to tracing mechanism
- State became "in the green" and on track to recovery

Use Cases

- **Reducing Readmissions** - Since one of the most common causes of patient readmissions is congestive heart failure, we analyzed millions of records for congestive heart failure cases and built a machine learning model using that data. This technology was able to determine the probability that a patient would be readmitted to the hospital, allowing providers to take actions to lower that probability. This created a 70% reduction in readmissions which directly translated to increased revenue.

- **Improving Efficacy of Treatments -** Determining which medications will be best for each patient is related to that person's genetic makeup. Cloudticity Healthcare DataHub gives providers the ability to match a patient's symptoms and genomics with millions of other similar cases. Then, applying machine learning, you can identify the best treatment for each individual patient.

- **Improving Clinical Efficiency -** With Cloudticity Healthcare DataHub, you can track ADTs and view your average wait time in each waiting room in real-time. Then you can use this data to adjust in order to create a more efficient visit and provide better patient experiences.

- **Driving Additional Revenue** - Many small daily procedures or treatment actions – like giving Tylenol to a patient with a headache – are never billed. This adds up to a significant amount of lost revenue over time. To solve this problem, Cloudticity Healthcare DataHub identifies unstructured clinical notes and codes them for billing, helping providers capture additional revenue.

Solution available in [AWS Marketplace](#)