RED HAT DATA ANALYTICS PLATFORM: IMPROVING HEALTHCARE WITH BIG DATA

BROCHURE

INDUSTRY OVERVIEW

Analytics software is often used to provide insight into improving healthcare, but insights are only as good as the underlying data. Data sets must be complete, current, and secure. No amount of investment in analytics software will make up for a weak data foundation, and enterprise data warehouses often collapse under the demands of big data.

ADVANTAGES OF AN OPEN PLATFORM

Your underlying data platform plays a critical role in data management. Compared to proprietary platforms, open source technologies make it faster and less expensive to:

- Integrate healthcare data from multiple sources and varying formats into a 360-degree view.
- Move from on-premise data storage to any cloud with open cloud access, eliminating the need to renegotiate contracts.
- Quickly modify automated rules about data retention and actions as policies change.
- Comply with ever-evolving security and privacy requirements and legislative mandates.

RED HAT APPROACH

Analyzing real-time data in conjunction with static data provides more accurate predictions. The data analytics platform built by Red Hat provides technologies for analyzing both stored data and data in motion in the same architecture. Building blocks in the platform include:

An application programming interface (API) bridge. Share data with other agencies and payer systems, encouraging interagency collaboration.

Storage. Create a data lake containing all data in any format, lowering costs and increasing storage utilization.

Infrastructure-as-a-Service (IaaS). Increase resource utilization by delivering infrastructure on demand, using Red Hat® Ceph Storage with Apache Hadoop and Apache Spark.

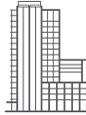**Integration services.** Integrate information from multiple applications into a real-time data stream.

Intelligent data services. Add context to real-time data by fusing it with external data sources.

Evidence-based rules. Invoke automated action in response to triggers based on business rules.

Data-as-a-Service (DaaS). Deliver the right data at the right time to care providers, developers, researchers, and analysts.

Security. Comply with healthcare security and privacy regulations, including HIPAA 5010 and Health Level Seven (HL7).

Platform-as-a-Service (PaaS). Deploy and manage the data platform on a public, private, or hybrid cloud.
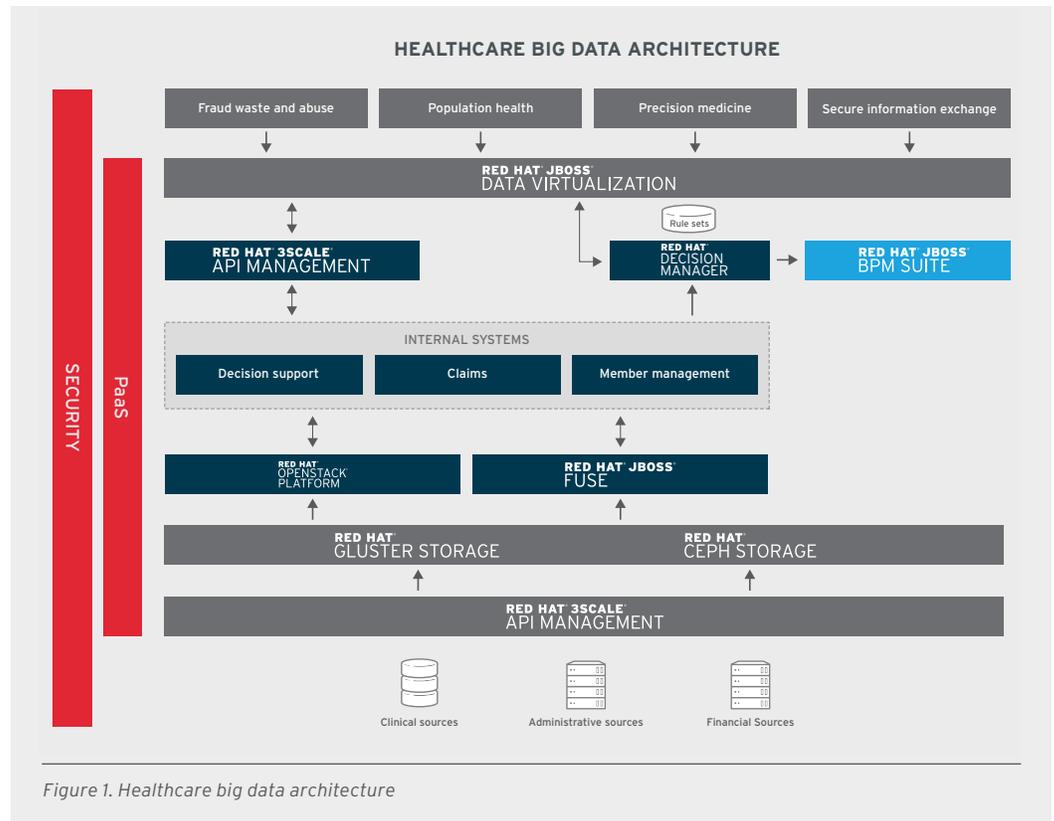
Figure 1. Healthcare big data architecture

CONCLUSION

How much your organization benefits from healthcare analytics depends on your data platform. With a data foundation built on Red Hat offerings, you can connect healthcare data sources and integrate them for a complete view of the patient. In addition, you will be able to ingest and analyze both real-time and stored data and define rules for automated responses to specified conditions.

Deliver the right data in the right format to the right people to reduce costs while improving outcomes.

Learn more at www.redhat.com/health.