

Clinical data pipelines for data integrity and standards



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Leveraging clinical data pipelines to enable data integrity and standards governance



Enabling modern, digital and datadriven clinical trials

Foundations to power the modern clinical trial value chain requires modern technology and infrastructure, data and analytics

Technology infrastructure for data collection from wearables, validated instruments, genomics, sensors, etc. Data pipeline and modern technology infrastructure and infrastructure, data intelligence and automation Enabling data-driven decision-making through data mining, modeling, analytics and data science



Clinical Data Pipeline

Building a reliable, robust and automated clinical data pipeline to reduce cycle times







Data Ingestion Automation

Automating data ingestion from a myriad of sources using event-based framework

Persisting and storing various formats of data for efficient processing

No-code Transformations

Streamlining integration and transformation workflows to better manage data assets

Tools to combine, curate and standardize data with built-in governance

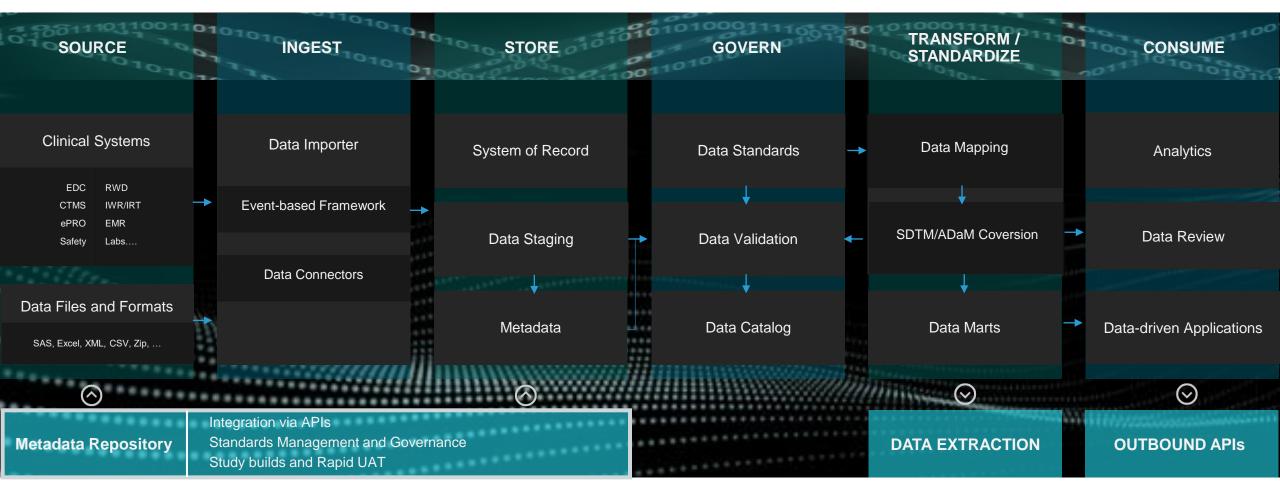
Automated Insights and Actions

Publish data into more analysis-ready formats for downstream analytics

Analytics-ready data for quick and easy consumption across variety of use cases and external systems



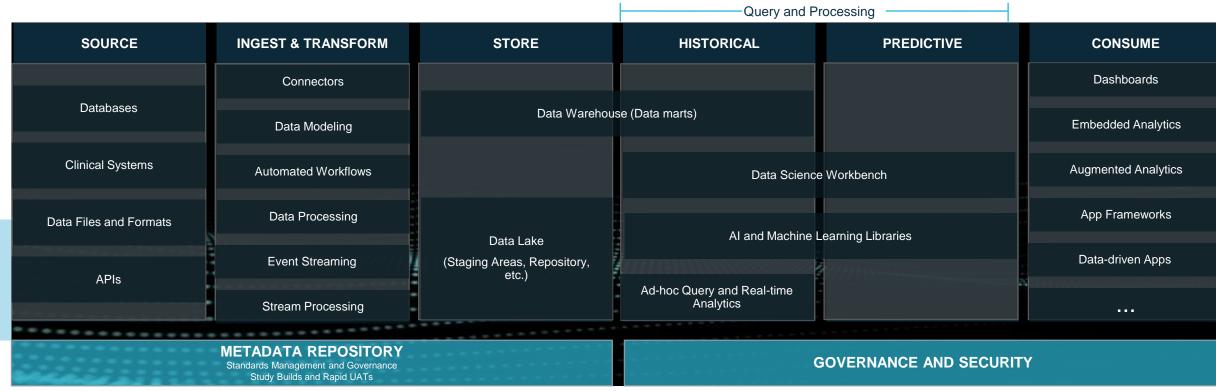
Scaling clinical data pipeline automation for faster standardization and governed access to data for analytics





Unified architecture for modern data infrastructure and data pipelines – "clinical data lakehouse?"

Scaling clinical data pipeline automation for faster standardization and governed access to data



Reference: https://a16z.com/2020/10/27/blueprints-for-data-infrastructure-lakehouse-storage-data-is-not-the-new-oil-more/



Automating a clinical data pipeline enables data-driven actions and decisions for better outcomes

Automated data review for efficient Data standardization for efficient Advanced Analytics using AI and submissions and compliance Machine Learning data management Clinical Data Analytics Publish standardized datasets in near real-time Incremental Data Review Clinical Trial Operations Change Tracking Systematic metadata validation, data quality and compliance checks **Cross-Study Analytics** Issues and Query Management Risk Based Monitoring Analytics driven data quality issues detection Data Integrity and Quality



Industry is rapidly evolving to modernize clinical trials and with it....

Novel approaches to modernize clinical trials

Build a robust data and technology strategy with defined business outcomes for pervasive transformation and automation

Leverage standards-based technology to manage the increasing volume of data

Taking a more end-to-end approach to build fully automated data pipelines leveraging a Clinical Data Platform or Data Hub rather than point solutions

Invest in an interoperable ecosystem of tools, technology and clinical systems

Ensuring interoperability between clinical systems and flexibility to fit with existing infrastructure to manage shifts in industry trends

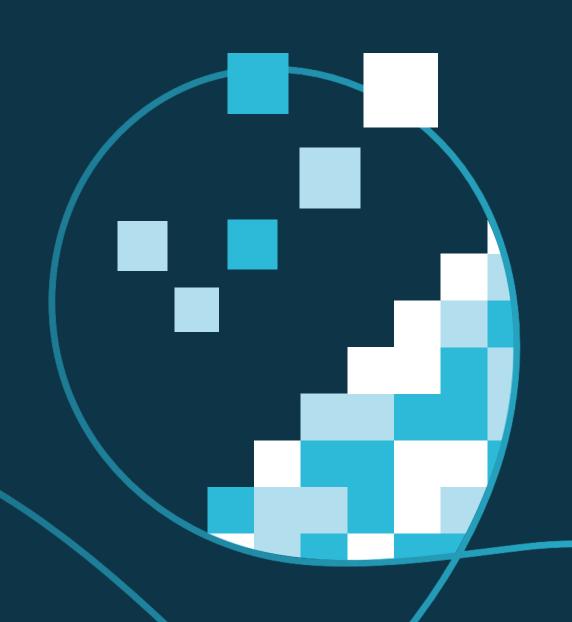




Thank you

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Scale automation with data standardization and data pipelines

Faster time to value, managing clinical trials efficiently with less effort and better quality

DATA STANDARDS

Technology to standardize data

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DATA CENTRICITY

Creating value with democratized delivering faster insights in the control of the

DATA PLATFORM

Modular and reusable platform-in the based architecture to scale, in the based architecture to scale,

