AI EHR Data Curation for Real-World Evidence

AI Data Curation for Biology Project Category

Contact +91-8977624748 for joining process

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Explore focused-area projects under AI EHR Data Curation for Real-World Evidence, part of AI Data Curation for Biology at NTHRYS Biotech Labs.

FOCUSED AREAS

Clinical Note Extraction and Structuring Platform

A SaaS platform that automatically extracts unstructured clinical notes from EHRs and converts them into standardized, machine-readable structured data formats. This enables pharma and biotech companies to rapidly compile real-world evidence datasets for regulatory submissions and health economic studies, reducing manual curation costs by 80%.

Patient De-identification and Privacy Compliance Engine

A commercial tool that automatically removes PHI from EHR data while maintaining clinical utility through advanced NLP and rule-based algorithms compliant with HIPAA, GDPR, and CCPA standards. Healthcare organizations and CROs can securely share de-identified datasets with research partners, unlocking new revenue streams through data licensing agreements.

Real-World Evidence Phenotyping and Cohort Building Tool

An enterprise platform that uses AI to identify and define patient cohorts from EHR data based on complex clinical phenotypes and biomarker profiles for specific diseases. Clinical research organizations leverage this to rapidly assemble RWE cohorts for outcomes research, reducing patient identification time from months to weeks and accelerating go-to-market timelines.

EHR Data Quality Validation and Normalization Service

A managed service that identifies, flags, and corrects data quality issues, missing values, and inconsistencies across heterogeneous EHR systems using machine learning validation rules. Contract research organizations and biotech firms can confidently submit RWE datasets for regulatory submissions, reducing trial failures and accelerating FDA approval cycles.

Longitudinal Patient Journey Mapping and Analytics Engine

A cloud-based platform that reconstructs complete patient care pathways from fragmented EHR records, tracking treatment sequences, medication adherence, and clinical outcomes over time. Pharmaceutical companies use this to generate real-world evidence on treatment effectiveness and patient journeys, supporting pricing negotiations with payers and identifying new commercial opportunities.

Adverse Event Signal Detection and Pharmacovigilance Platform

An AI-powered SaaS solution that automatically mines EHR data and clinical notes to identify safety signals, adverse events, and drug-drug interactions at scale. Pharma manufacturers and post-market surveillance teams use this to detect safety issues faster than traditional methods, reducing litigation risk and enabling proactive regulatory communications.

Multi-Source EHR Data Integration and Harmonization Platform

An enterprise data platform that ingests and harmonizes EHR data from hundreds of disparate healthcare systems, mapping different coding standards and data schemas into unified, analyzable formats. Healthcare networks and research consortiums leverage this to create large federated datasets for RWE studies, enabling new subscription and data licensing revenue models.

Biomarker and Lab Value Extraction AI Classification Service

A specialized tool that automatically extracts biomarker and laboratory test results from unstructured lab reports and clinical notes using computer vision and NLP, standardizing values across different lab systems. Oncology and rare disease companies use this to build RWE datasets for precision medicine studies, accelerating identification of patient subpopulations responsive to targeted therapies.

Real-World Evidence Regulatory Submission Package Generation

A commercial solution that curates, validates, and formats EHR-derived real-world evidence into FDA-compliant submission packages with full audit trails and statistical summaries. Biotech companies can compress regulatory timelines by 20-30% by combining RWE with clinical trial data, reducing approval costs and enabling faster patient access.

Patient Stratification and Risk Prediction ML Model Platform

An AI platform that builds and deploys machine learning models for patient risk prediction, disease progression, and treatment response using curated EHR datasets with continuous model retraining. Health systems and payers can implement precision medicine initiatives and value-based care programs, improving clinical outcomes while reducing healthcare costs and creating new service revenue.