

CASE STUDY



OMOP MODEL FOR CLINICAL DECISIONS

Utilization of the OMOP CDM for RWD, enabling standardization and analysis of oncology data to support clinical decision-making.

Company Overview

A renowned healthtech company dedicated to improving cancer treatment

Industry

Health Technology

Number of Employees

Over 1000 employees

Location

NY, USA

BACKGROUND

Dedicated to advancing cancer treatment, a New York-based healthtech company amassed valuable insights through years of patient care. Their work in improving outcomes generated extensive datasets, each holding potential to reshape oncology care. The company's vision was clear: to turn this wealth of information into actionable strategies that could enhance treatment decisions.

CHALLENGE

Oncology data, rich with varied procedures, regimens, and drugs, frequently creates inconsistencies in data representation. These inconsistencies, when paired with complex data structures, make it difficult in extracting actionable insights.

In the face of these challenges, the Sponsor identified the immense potential locked within this data. Believing that overcoming these obstacles could pave the way for groundbreaking insights in oncology research and treatment, the Sponsor enlisted the expertise of Maxis Clinical Sciences (MCS). Known for their proficiency in clinical data analysis and adherence to meticulous, standardized methodologies, MCS was approached to tackle the complexities and introduce a standardized, efficient approach. The objective was clear: transform the chaotic oncology data landscape to derive meaningful insights.

SOLUTION

The Observational Medical Outcomes Partnership (OMOP) Common Data Model emerges as a silver lining, offering a standardized and adept method to dissect and derive insights from such data. We identified a diverse oncology dataset that included medical records, claims records, pharmacy claims, laboratory data, and -OMICS data. To align with global regulations, all these data points were rigorously anonymized to ensure GDPR compliance.



Data standardisation and harmonisation



Oncology data analysis and data-driven insights



Personalised solutions to improve patient satisfaction and care outcomes

The transformation of this data from its native format to the OMOP CDM format was carried out using standardized ETL processes. These processes involved careful mapping of source data elements to their corresponding OMOP CDM concepts, ensuring the preservation of all original associations. Additionally, for global accessibility, all this data was securely uploaded to Maxis-Cloud.

OUTCOME

With the data suitably formatted and stored, we started our journey of analysis. We generated varied insights focusing on patient cohorts, treatment patterns, and diverse outcomes. The primary aim behind these analyses was to evaluate the real-world effectiveness and safety parameters of oncological interventions.

BENEFITS

Our efforts have produced multiple tangible benefits for the healthcare community. The data, now aligned with the CTR 2.6 platform, is effortlessly findable, accessible, interoperable, and reusable (FAIR). The ease of data ingestion was made possible with the integration of the MaxisIT API Adapter. Within the OMOP CDM's Metadata Repository (MDR), we ensured meticulous management of vocabularies and dictionaries. The data verification was stringent, with well-configured business rules.

Another feather in our cap was the enriched data obtained by adept healthcare coding using a multitude of dictionaries. Most importantly, throughout the process, the sanctity of sensitive data was maintained by impeccable de-identification procedures.



Turning to Maxis Clinical Sciences made all the difference for us. They transformed our complex oncology data into meaningful insights that we could actually use. But beyond their technical expertise, it was their dedication to our mission that truly stood out. Thanks to MCS team, we're not just enhancing patient care and outcomes; we're innovating our oncology care approach.

-- Chief Medical Officer

Learn More

Maxis Clinical Sciences brings together the power of clinical research & biometrics expertise with real-world evidence capabilities and digital transformation solutions. We partner with healthcare and life sciences organizations to optimize clinical trials, uncover meaningful insights from healthcare data, and accelerate the development of new treatments. Our integrated approach focuses on one clear goal: improving patient outcomes through innovation.

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