RTS labs

Case Study

Streamlining Critical Data From Multiple Sites Provides Support For Clinical Studies

RTS Labs Streamlines Data Management & Improves Performance of Clinical Trials Department

Company:
Clinical Trial Department

Challenge:
- Laborious data management process
- Critical clinical data resides in multiple locations
- Process of gathering, validating and analyzing data slowed productivity and negatively impacted data quality

Solution:
- Improve efficiencies in documenting, reporting and auditing
- Streamline data collection process from disparate sources
- Improve data quality by avoiding stale data or spreadsheet errors

Results:
- Created one single data repository to collect data from multiple locations
- Improved data quality by streamlining data directly from clinical systems
- Facilitated a more efficient analysis and reporting process

Our Client's Clinical Trials department was faced with a laborious data management process. Their studies depended on collecting clinical information from their internal Lab information system as well as from external sites. The process of gathering, validating, and analyzing data from multiple internal databases and external participating sites was negatively impacting both the quality of data and the productivity of the team.

The Opportunity

RTS Labs was brought in to help the Clinical Trials team scale up on research by streamlining their data management process. RTS Labs enabled the Client to:

1. Spend more time on data analysis and research and less time on data capture and management
2. Streamline documenting and reporting on the study being performed
3. Create one platform for all team members to store and view research data
4. Avoid stale data in excel spreadsheets and improve overall data quality
5. Compare current study data with results from previously conducted studies

How RTS Has Helped

Clinical Research Platform: RTS Labs leveraged the clinical research platform and improved the Client's effectiveness of documenting and reporting on clinical studies. Previously, the Client was using Excel to

store all their clinical study data. RTS helped to institute Open Clinica for collecting data from participating practices and physicians. This improved data quality, avoided stale data, and provided one platform to record all relevant data. This also made auditing and reporting on their study data much easier.

Data Integration and Reporting: The Client needed to access data from both their internal lab information system and Open Clinica in order to analyze the study's data. Previously, the Client was downloading data from both systems to Excel, combining it and then analyzing it. They then had to upload data from their internal lab information system to Open Clinica for further analysis. Data downloaded from the internal lab information   system was not in Open Clinica's import format.

To streamline these processes, RTS Labs built a datamart to combine data from both the systems, using ETL tools to extract, transform and load data from source databases. We also leveraged BI tools (Jasper Soft) to create reports from the datamart and to export data in the desired format.

Results

The new data repository and reports brought together crucial data required to back several new research studies, publish papers, and uncover useful findings. These studies included:
- Tracking demographic and biomarker profiles and comparing trends over time
- Studying impact of health coach consultations on patient test results
- Evaluating the effect of APO E genotype on fish oil supplementation
- Analyzing the relationship between Omega3 Fatty acid levels and a wide range of lipid, lipoprotein, inflammatory and other factors

Conclusion

By streamlining the data gathering, data management and analysis processes while working within the regulatory framework, RTS enabled the Clinical Trials team to scale their research without having to scale their resources. The solution facilitated by RTS Labs was integral for the team to stay competitive in the diagnostics industry.