

CASE STUDY

ER/Studio Helps LabCorp Protect Their Data and Build Their Data Future



25% Reduction in
Data Silos

30% Decrease in Time
Spent on Compliance
Reporting

Background

LabCorp is one of the world's largest clinical laboratory networks, providing diagnostic testing and research services to improve patient care and clinical outcomes. With the ever-growing volume of medical data, from diagnostic results to patient records, LabCorp faces the critical challenge of managing and analyzing complex healthcare data. To streamline its data management processes and ensure regulatory compliance, LabCorp adopted ER/Studio, an advanced data architecture and modeling tool that has become integral to its data strategy.

Challenge

Terry Lawrence, Manager of Data Architecture at LabCorp, chose ER/Studio for its reverse engineering capabilities, business glossaries, and metadata harvesting. His team of data architects faces numerous challenges.

'Our logical and physical models are vital to managing our domains. Without the standardization they provide, we'd be dead in the water,' Lawrence said. 'Protecting patient data is crucial, and we rely on ER/Studio as the foundation for building our data products.'

Lawrence's team faces several significant challenges related to data management:

1. **Unique Complex Data Ecosystem:** LabCorp's vast and varied data sources, including patient records, lab results, and research data, require precise structuring. ER/Studio provides comprehensive data modeling, which helps LabCorp map these different data sources into clear, logical models.
2. **Regulatory Compliance:** Strict healthcare regulations, including HIPAA, necessitate rigorous data governance practices to protect patient information and ensure compliance with privacy and security standards. ER/Studio helps LabCorp embed data governance policies into their data models. This ensures that data access controls, privacy measures, and compliance rules are automatically enforced across all systems.
3. **Data Integration and Interoperability:** LabCorp operates across multiple systems and platforms, making data integration and interoperability a significant challenge. Given the diversity of systems and platforms within LabCorp, achieving data integration is a significant hurdle. ER/Studio enables metadata management and data lineage tracking, which helps LabCorp integrate data from various systems while ensuring that the flow and transformation of data are traceable.
4. **Data Accuracy and Quality:** ER/Studio provides robust data quality management features that allow LabCorp to establish clear data validation rules within their models. This ensures that only high-quality data is utilized across the organization, which is critical for accurate diagnostics, research insights, and patient care.

Solution

LabCorp implemented ER/Studio to address these challenges head-on, gaining control over their data management and governance. ER/Studio transformed how LabCorp handles data, providing a comprehensive solution to manage complex data assets while maintaining compliance with stringent industry standards.

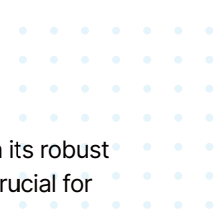
Here's how ER/Studio helped LabCorp transform its data management strategy:

1. **Unified Data Modeling:** ER/Studio enabled LabCorp to design comprehensive data models that mapped the structure of their healthcare data assets. These models provided a unified view of data relationships across different systems, helping the company streamline data integration efforts and ensure consistency across departments.
2. **Metadata Management:** Managing metadata is essential for any healthcare organization dealing with sensitive data. ER/Studio allowed LabCorp to capture and manage metadata effectively, providing detailed information about their data assets' structure, lineage, and usage. This enhanced data traceability throughout the organization, improving transparency and supporting regulatory compliance.
3. **Collaboration and Version Control:** Collaboration between different teams is essential in a large, data-driven organization like LabCorp. ER/Studio's collaboration and version control features allowed multiple teams to work together efficiently, including IT, data management, and clinical research departments. This feature helped maintain version control, track changes to data models, and ensure that teams were always working with the latest information, leading to **fewer errors and improved collaboration**.

“Mitigating risk is so important here at LabCorp. ER/Studio helps us, especially on the transaction aspects of our business. Our glossaries are just where we want them to be – that makes it so much easier for our developers as they jump from project to project.”



Benefits



Terry Lawrence told us, "ER/Studio has transformed the way we manage and utilize our healthcare data at LabCorp. With its robust data modeling and governance capabilities, we've seen significant improvements in data accuracy and quality, which is crucial for clinical decision-making and research."

Lawrence added, "ER/Studio has streamlined our compliance processes, ensuring that our data governance policies align with HIPAA and other regulations. Additionally, the platform has enabled better collaboration across our departments, helping us move from manual data management tasks to more strategic initiatives. It's been a game-changer for us."

The implementation of ER/Studio brought several tangible benefits to LabCorp:

Enhanced Data Quality:

- ER/Studio has been instrumental in helping LabCorp improve the overall quality and accuracy of their data, which is critical for clinical decision-making and research initiatives. With clearly defined data models and robust data governance policies, LabCorp ensures that the data captured and processed within their systems is consistently accurate and reliable. By embedding validation rules directly into their data models, they've reduced data inconsistencies, ensuring that critical data, such as patient information and lab results, is clean and free from errors. This improvement in data quality directly impacts the success of LabCorp's clinical outcomes and research advancements.

Streamlined Compliance:

- LabCorp operates in a heavily regulated industry, requiring strict adherence to HIPAA and other healthcare privacy standards. ER/Studio allows them to embed governance rules into their data models, ensuring the automatic and consistent application of privacy and security protocols across the organization. This approach provides full transparency and traceability of data, making it easier to demonstrate compliance during audits and maintain regulatory requirements. The data lineage and audit capabilities within ER/Studio offer detailed tracking of data transformations, further improving LabCorp's ability to meet compliance mandates and reduce the risk of regulatory violations.

Shift to Strategic Initiatives:

- By automating manual data management tasks and reducing errors, ER/Studio has freed up LabCorp's teams to focus on more strategic, value-driven initiatives. Instead of spending time on data correction and maintenance tasks, the teams can now prioritize advancing research, improving clinical decision-making processes, and enhancing patient care delivery. This shift in focus allows LabCorp to innovate and push forward initiatives that have a more direct impact on improving healthcare outcomes and advancing medical research.

Optimized Collaboration:

- ER/Studio has fostered cross-departmental collaboration within LabCorp by offering a unified data management platform that all teams can access and use. Different departments, from clinical research to administration, now have a consistent understanding of the data they work with, thanks to standardized business glossaries and metadata management within ER/Studio. This unified approach ensures that teams work from the same definitions, reducing confusion, minimizing errors, and improving communication. This collaboration is particularly important in healthcare, where multiple teams must work together seamlessly to provide the best possible care.



IDERA's ER/Studio Data Modeling Tools

ER/Studio solutions help your organization and technical stakeholders map your complex data landscape, building a solid foundation for data governance. Create a business-driven data architecture to organize information, govern data, and unify the enterprise:

- Create enterprise-class data models.
- Align processes with business goals.
- Collaborate on glossaries and metadata.

[LEARN MORE](#)

“ER/Studio gives us the control we need. We couldn't serve the business without it. We did look at your two primary competitors, but they didn't have the features or control to get the job done for us – our environment is too complex for them, but not for ER/Studio.”