

MedStar Health Performance Improvement & Analytics Case Study

How Persona-Driven Analytics Training Enabled Effective Crisis Management

Overview

MedStar Health's response to the national IV fluid shortage demonstrated the value in proactive investment in data fluency and technical upskilling of analytics teams. Prior investments made in Databricks training, including persona-based learning paths designed using guidance from Databricks and industry peers, enabled analytics engineers at MSH to rapidly create the data products and insights needed to support enterprise-wide IV fluid conservation efforts during a critical supply chain disruption.

The Challenge

- Limited enterprise visibility into IV fluid utilization trends during a rapidly developing supply shortage.
- Need for modern, advanced analytics capabilities that could quickly transform multiple data sources into actionable insights for leaders and frontline teams.

The Approach

A training program had been designed and implemented pre-shortage, focused on building the enterprise analytics team's proficiency with:

- Databricks as the enterprise data platform and data lake environment.
- Modern data engineering and analytics development practices.
- Integration of enterprise data assets within legacy analytics platform.
- Rapid dashboard and reporting development to support operational decision-making.

When the IV fluid shortage occurred, these newly developed skills enabled analytics teams to rapidly assemble data sources, develop new data pipelines, and create Tableau dashboards that provided visibility into IV fluid utilization across hospitals, nursing units, products, and operational areas. Technologies leveraged included Databricks and Tableau.

The Results

- Achieved IV fluid conservation goal for system
- Helped maintain safe patient care during a supply shortage
- One of first healthcare systems in US to develop & deliver insights at the level of detail needed to quickly identify areas (hospitals, nursing units, products, etc.) posing risks to achievement of conservation goals

Why It Matters

By investing early in persona-based learning paths around a new analytics capability, MedStar Health was able to rapidly mobilize teams, develop critical data products, and provide actionable insights during a national IV fluid shortage without delaying operational decision-making.

Key Takeaways

- Invest in analytics capabilities before they are needed
- Pair modern technology with role-based training
- Cross-functional teams produce higher quality and more actionable analytics

Team

This initiative brought together Enterprise Analytics, Domain-Specific Analytics Teams, Information Services, Clinical Operations, Pharmacy, Supply Chain, Emergency Preparedness, Communications, Nursing Leadership, Medical Leadership, and Performance Improvement teams to support MedStar Health's response to the national IV fluid shortage. Working as a multidisciplinary team, these groups leveraged Databricks, legacy analytics platforms and Tableau to rapidly develop the data pipelines, dashboards, and insights needed to guide enterprise-wide conservation efforts while maintaining safe patient care.

Learn More

For additional information, please contact our Enterprise Analytics team at:

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