

Critical Clinical Information Demystified with Database Training

A Vital Mission at Risk

Recently, Galen Healthcare Solutions had the pleasure of providing database training at a large independent not-for-profit treatment and research center on the forefront for more than 50 years of clinical research trials for the treatment of chronic renal disease, end stage renal disease, transplantation, polycystic kidney disease, sepsis and lipid disorders. Migration to a new EHR, Allscripts Touchworks™ Enterprise EHR posed a significant challenge to the analysts in the IT Department as the database contains over 1000 tables, 3000 stored procedures and hundreds of functions and views. They needed to develop a deeper understanding of the database to identify criteria for potential clinical trial study populations. Galen offered database experts with not only years of expertise, but also experience with the nuances of clinical research criteria.

A Common Challenge

One challenge was evident immediately. There was a need to design training that encompassed knowledge level of learners

from varied roles and experience levels within the organization within one classroom environment. The levels of proficiency between database administrators, analysts and managers were markedly different as is often the case. To offset this imbalance Galen accepted students with at least beginner level SQL database reporting experience. The trainer then set the pace and tone of the learning to keep the entire room engaged.

Getting Started

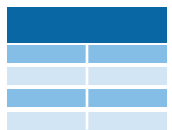
Day one of the training started with the foundation tables and as accumulation of skillset was achieved another layer of detail was presented. This allowed the learners to build upon the foundation tables throughout the three day course. We began by focusing identifying basic patient and provider information to build reports. Interactivity was encouraged. For example more experienced participants provided scenarios kept the training relevant and interesting while helping to build the common knowledge base of attendees with less experience.

Allscripts Touchworks™ Database Complexity



14 DATABASES

the most common and complex of which is "Works", the primary clinical database



1,350 TABLES



560,000 LINES OF CODE

over 3,200 stored procedures, 550 views and 200 functions



Building on the Knowledge

Then on days two and three the focus was narrowed to include clinical data by creating queries for results, medications, and problem lists. The common standards were demonstrated and then the students practiced applying the knowledge learned in one data set to another one structured in a similar way. Active class participation pinpointed the data elements that the class felt was important to them for their own internal initiatives. This technique made the learning not only more relevant and interesting to the participants, but also added to the library of tested queries ready for immediate use at the conclusion of the training.

Goals in Action

By the end of the three-day course, Galen covered specific scenarios that were seen in almost all inclusion criteria for their clinical trials, such as finding patients with a current diagnosis of

diabetes that had been seen in the clinic during a specific time period. Galen even began working with a list of inclusion and exclusion criteria and wrote queries specific to certain research studies that the team could re-use in every day practice.

Conclusion

Galen's Database Classroom Training offered the client review of the schema, common relationships, and an overview of the major tables of the Allscripts TouchWorks™ Enterprise EHR Database. At the same time the learning content was tailored to specific details relevant to the students to drive the organizations initiatives. It was truly remarkable to work with a group so new to Allscripts TouchWorks™ and to see them grasp the concepts so quickly. It allowed the analysts to support world-class researchers in their fight to provide new guidelines and medicinal therapies to the study of kidney disease and hypertension.

