
A New Era Of Business Analytics

Featuring Sonora Quest Laboratories

Sonora Quest Laboratories (SQL), a joint venture between Banner Health and Quest Diagnostics, is the nation's largest integrated laboratory system, serving more than 20,000 patients every day. With 15 hospital laboratories and over 3,000 laboratory employees, SQL must perform at the highest level on a daily basis.

The Patient-Centric Vision

As one of the U.S.'s leading innovative laboratories, SQL sought to achieve optimal financial performance despite new industry reimbursement models and regulations. As a first step towards achieving this goal, SQL transitioned from a client-centric LIS to patient-centric LIS in 2014. This massive IT operation put pressure on already strained resources and timelines. SQL leadership realized that in order to move forward with strategic initiatives, the organization needed a solution that provided end-user reports up-to-the-moment performance visibility across the entire organization. IT could not solely be responsible for providing reports anymore – end users needed to be able to quickly and easily view key performance metrics.

Challenges

There were numerous challenges standing in the way of SQL's transition to a fully patient-centric lab, including:

Non-integrated data sources: Multiple LIS, billing, and call center solutions meant siloed data across the entire organization. Oftentimes, employees had to log into multiple systems to calculate one specific metric, resulting in wasted time and resources.

Customers' changing requirements: SQL's proximity to start-ups such as Theranos resulted in pressure to provide direct-access testing to patients. This mentality has since spread across the industry, putting pressure on organizations to provide tangible value and services directly to patient populations.

New industry reimbursement models: Changes in government regulations and reimbursements meant SQL was not compensated at the same level as 3 years ago. Changes needed to be made in order to reach bottom lines and remain profitable.

Patients' continuum of care: The lab provides 70% of all patient data. SQL realized that in order to become truly patient-centric, they needed to share this wealth of data with providers and ACO partners, and in the process turn the lab into an important stop on a patient's care continuum.

Solutions

After reviewing multiple solutions, SQL selected the hc1 Healthcare Relationship Cloud® to address these challenges and maximize efficiencies across the organization. SQL users can now fully understand the various types of data available, what key metrics are missing, and how they can use this data to the fullest potential.

With powerful analytics and live dashboards available via hc1, SQL now has a real-time, 360-degree view of data and metrics across departments, effectively dissolving data silos and providing users with the information necessary to provide a 5-star experience to patients and clients alike. SQL can now:

- Provide real-time financial and operational trend analysis to key stakeholders for increased visibility
- Use live dashboards and reports to review and manage TaT, utilization, reimbursements, volume, and productivity
- Track employee productivity across departments to drive accountability
- Broadcast reports and immediately notify key stakeholders of any risks, missed benchmarks, or red flags

Results

Today, SQL can accurately measure metrics, identify areas of focus, prioritize departmental needs against each other, and determine the appropriate resources. Having access to the data in hc1 enables continuous improvement by driving immediate action.

With hc1, SQL was able to reduce the labor associated with their 'daily performance report' from 5 hours to 45 minutes per day, increasing efficiencies by 85%. All departments have access to real-time and historical analytics – including financial and operational performance -- without needing IT assistance for every report. Leaders are confident in the numbers presented and employee efficiency has increased.

Other use cases include:

Ordering Patterns: It is important for SQL to provide value to their clients and patients and do not allow the lab system to take advantage throughout their entire care journey. Now, SQL can review a specific physician's ordering pattern, see what is being ordered, who is ordering it, and how often certain tests are ordered. Tracking these metrics across date ranges, geographic

locations, and other demographics enables SQL to have a holistic picture of their physicians and their ordering practices.

Reimbursements: Live analytics in hc1 enable SQL to generate a granular-level view of CPTs ordered, CPTs ordered but not paid, and CPTs that were reimbursed at a lower level than expected. Leaders can look at the profitability of certain tests, and identify the ones in need of further investigation. Previously, this was all completed via email with the Finance department. Through automation, the information is received in a timely manner that enables stakeholders to take action and make critical decisions without wasting time.

Productivity and Scheduling: It is extremely important that SQL leaders understand how staffing and volume intersect in order to ensure they are properly staffed for the types of tests performed. Graphs and visual charts allow users to track if they are meeting TAT benchmarks, if their volume is level-loaded, and track by the hour how many tests are coming in and how many are completed. hc1 has helped SQL to pinpoint bandwidth by test and by department to ensure they are staffing the correct departments at the correct times and at the correct levels. Leaders can also identify if certain departments are struggling with staffing or missing their benchmarks.

Growing with Healthcare Relationship Management

SQL is now expanding the use of the hc1 platform by integrating Lean Six Sigma tools in order to measure process performance before, during, and after process improvements. Having access to the data in hc1 enables continuous improvement by driving immediate action. One current area of focus is measuring the specimen transportation turnaround time for STATs. SQL has insight into the turnaround time from accession to report, but no visibility between collections and accessions. To resolve this immediate need, the courier data system is in the process being integrated with LIS data to pull real-time statistics to better serve the provider and patient.

The leaders at SQL are looking forward to building upon their innovative approaches to patient-centric care. In the future, SQL will integrate an additional CRM component, further increase hospital functionality, and customize reporting capabilities. SQL is currently working on activating new reporting features to pinpoint reasons for client attrition, monitor cost per test, track productivity metrics by discipline and employee, and provide client specific analytics to increase the patient experience.