

# **USC Medical Center: Utilization Review Tracking System Analysis**

## The Client

LAC (Los Angeles County)-USC Medical Center is one of the nation's largest public hospitals, as well as the largest medical training center in the country. Staffed by more than 450 full-time faculty of USC's Keck School and approximately 850 medical residents in training, the hospital treats close to 800,000 patients, delivers 10,000 babies and admits 250,000 people in its emergency room each year.

With an average inflow of 140 admitted patients per day, the Utilization Review (UR) System of the LAC-USC Medical Center is entrusted to serve as an efficient, centralized, high-capacity hub that ensures both the optimal treatment of patients and the timely recovery of funds for the hospital through its designated payment sources.

#### The Challenge

Almost a decade old, the UR System had become cumbersome due to obsolete hardware, unsupported software and dependency on manual processes. This situation jeopardized the organization's performance in processing Treatment Authorization Requests (TARs) for reimbursement from the hospital's payment sources. The hospital needed a plan for a re-designed UR System that would dramatically reduce the task-related pitfalls on the micro level and bring about macro level efficiencies to improve the overall productivity of the UR system. Performance would be crucial, as the department had over 7,000 employees across multiple departments who are all potential users of the application. Security was another key design concern, as some data would need to be visible only to LADCFS employees due to HIPAA regulations.

The department needed a thorough analysis and recommendation addressing this challenge to be completed within a 5-month timeframe.

#### The Solution

This ambitious project began with an exhaustive analysis of all UR system users and processes. The existing UR System relied on the orchestration of forms, approvals, correspondence, validations and reporting from several departments including, admission, UR clerical, UR nursing, the patient financial office, the consolidated business office, legal and 3rd party contractors. The Saga team conducted in-depth interviews with each of these departments and developed a process document that charted the relative impact, bottleneck potential and critical needs and obstacles for each one. Once this step



was completed, an analysis of the UR system's component processes was conducted, followed by a proposed workflow and process implementation plan that utilized web-enabled functionality to connect data flow, forms processing and communication via one centralized system. In addition to integrating the four legacy hospital information systems (Affinity, HBOC, PFS and Meds), the UR System was segmented into the following nine modules: User Management, Patient, Admission, Eligibility, TAR, AR, Appeal, Litigation, Report and Administration. Each module represented a distinct process integral to the



# **USC Medical Center: Utilization Review Tracking System Analysis**

effective processing of TARs. To rein this complex system into a manageable format for its users, several role-based interfaces were presented, incorporating maximum ease, relevancy and efficiency.

## The Benefits

With a working project plan in hand, USC Medical Center moved one step closer to realizing its vision of a smooth procedural and information flow throughout the entire UR process. Paper-heavy processes could be replaced by electronic transmission of information. Forms processing could be performed via a user-friendly GUI instead of manual transcription. Field and information validation and verification could occur automatically in real-time through a single integrated database. All of these features would in turn shorten the turnaround required to process TARs and recover funds more efficiently for the hospital.

On the process level, implementing this plan would help the organization enjoy increased work efficiency using less resources, as well as improved accuracy and data integrity. From an output standpoint, the department would be able to process a higher volume of TARs and appeals. Operationally, the system would require less maintenance, as well as enjoy an unprecedented level of security. USC Medical Center now has a plan of action to greatly enhance its bottom line by reducing lost opportunities and increasing the rate and amount of incoming revenue.

#### Technologies Utilized

ASP.NET, C#.NET, HTML, JavaScript, XML, Web Service, Oracle9i Database Server